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RNW 1595

1 SI - CA/097/027797E
CC - CA/159000
AU - Dodic S
TI - Vinyl chloride and its polymer as a new potential pathogenic factor in modern illness
SO - Med. Podmladak; VOL 32, ISS 1, 1980,67-9
PT - JOURNAL ARTICLE
CY - Yugoslavia
LA - SCR
CD - MPODA
IS - 0369-1527
AB - CBAC COPYRIGHT: CHEM ABS Review vinyl chloride occupational hazard Cancer vinyl chloride manuf review PVC manuf occupational hazard review Disease occupational PVC chloroethene review;Disease In vinyl chloride and poly(vinyl chloride) manufg. workers, in Yugoslavia Occupational;Neoplasm In vinyl chloride and poly(vinyl chloride) manufg. workers, in Yugoslavia
RN - 75-01-4; 9002-86-2
EM - 8208

2 SI - CA/096/175526K
CC - CA/104003
AU - Kogai AM ; Stepanenko AF ; Dubinskaya AB ; Kachkina GV
TI - Toxicological characteristics of vinyl chloride dusts of MA-20 and A-150M copolymers
SO - Vliyanie Khim. Faktorov Vnesh. Sredy na Zdorov'e Cheloveka, Rostov N/D; 1980,98-100
PT - JOURNAL ARTICLE
CY - USSR
LA - RUS
CD - D3RAP
AB - CBAC COPYRIGHT: CHEM ABS Title only translated. Vinyl chloride copolymer dust air Pollution air vinyl chloride copolymer MA 20 dust air pollution A 150M dust air pollution
RN - 75-01-4; 25035-98-7; 81627-77-2
EM - 8206

3 SI - CA/096/099133N
CC - CA/104006
AU - Maltoni C ; Lefemine G ; Ciliberti A ; Cotti G ; Carretti D
AD - Inst. Oncol. Tumour Cent., Bologna
TI - Vinyl chloride carcinogenicity bioassays (BT project) as an experimental model for risk identification and assessment in environmental and occupational carcinogenesis
SO - Epidemiol. Anim. Epidemiol. Hum.: Cas Chlorure Vinyle Monomere, [Reun. Club Cancerog. Chim.], 20th; 1980,11-112
PT - MONOGRAPH
CY - Italy
LA - ENG/FR
CD - 46XZA
AB - CBAC COPYRIGHT: CHEM ABS Tumors were induced in rats following long-term exposure to 14 doses of vinyl chloride (I) [75-01-4]

(from 1 to 30,000 ppm) by inhalation and to 6 doses of I (from 0.03 to 50 mg/hg) by ingestion. Risk identification and assessment in environmental and occupational carcinogenesis are discussed.
RN - 75-01-4
EM - 8205

4 SI - CA/096/073831P
CC - CA/159001
AU - Shpak LI ; Kirsanova AI ; Derbenev VV
TI - Determination of vinyl chloride in polymer dusts and in air by gas-liquid chromatography applicable to toxicological studies
SO - Vliyanie Khim. Faktorov Vnesh. Sredy na Zdorov'e Cheloveka, Rostov N/D; 1980,101-3
PT - JOURNAL ARTICLE
CY - USSR
LA - RUS
CD - D3RAP
AB - CBAC COPYRIGHT: CHEM ABS Vinyl chloride detn air dust Polymer dust vinyl chloride detn Toxicol vinyl chloride detn;Air analysis Vinyl chloride detn. in, gas chromatog. in, toxicol. in relation to;Dust Vinyl chloride detn. in, gas chromatog. in, toxicol. in relation to Polymer;Polymers Vinyl chloride detn. in, gas chromatog. in, toxicol. in relation to Dust
RN - 75-01-4
EM - 8204

5 SI - CA/094/196914J
AU - Antonyuzhenko VA
TI - [Occupational] Vinyl Chloride Disease - Hydrocarbon Neurotoxicosis
SO - 1980,183 pp.
LA - RUS
CD - BOOKA
AB - CBAC COPYRIGHT: CHEM ABS ADDENDUM A book. Book vinyl chloride neurotoxicosis Safety neurotoxicosis vinyl chloride book
RN - 75-01-4
EM - 8110

6 SI - CA/094/151415F
AU - Gaylor DW ; Kodell RL
AD - Div. Biom., Natl. Cent. Toxicol. Res., Jefferson
TI - Linear interpolation algorithm for low dose risk assessment of toxic substances
SO - J. Environ. Pathol. Toxicol.; VOL 4, ISS 5-6, 1980,305-12
LA - ENG
CD - JEPTD
AB - CBAC COPYRIGHT: CHEM ABS ADDENDUM In order to detect potential toxic effects of substances, relatively high doses generally are administered to relatively small nos. of lab. animals. It is impossible to est. low levels of disease incidence with precision at low environmental dose levels even with large nos. of lab. animals. However, upper limits on risk can be obtained for convex dose-response curves by linear interpolation between the

lowest exptl. dose level and zero. A simple math. algorithm is provided for low-dose risk assessment from dose-response data and the performance of this procedure is evaluated for a variety of toxicol. data, including but not limited to carcinogenesis. The low-dose confidence limits resulting from linear interpolation are similar to those obtained from the Armitage-Doll multistage model (1961).

RN - 50-29-3; 60-57-1; 62-75-9; 75-01-4; 96-45-7; 118-74-1; 128-44-9; 139-13-9; 542-88-1; 828-00-2; 1162-65-8; 1746-01-6
EM - 8110

7 SI - CA/094/144806F
AU - Stonebraker RD ; Smith AJ Jr
AD - Environ. Emergency Branch, U. S. Environ. Prot. Agency, Atlanta
TI - Containment and treatment of a mixed chemical discharge from the "Valley of the Drums" near Louisville, Kentucky
SO - Control Hazard. Mater. Spills, Proc. Natl. Conf.; 1980,1-10
LA - ENG
CD - 44FUA
AB - CBAC COPYRIGHT: CHEM ABS ADDENDUM Emergency measures taken to contain and treat surface run-off from a hazardous waste dump site near Louisville, Kentucky, are described, including the construction of intercept trenches, a catchment basin, and an activated C adsorption unit preceded by an aeration and pH adjustment chamber.
RN - 65-85-0; 67-64-1; 71-36-3; 71-43-2; 75-01-4; 75-09-2; 75-34-3; 75-84-3; 76-22-2; 78-59-1; 78-83-1; 78-93-3; 83-32-9; 84-66-2; 84-74-2; 85-01-8; 86-73-7; 87-86-5; 88-99-3; 91-20-3; 91-22-5; 95-13-6; 98-55-5; 98-85-1; 100-41-4; 100-42-5; 101-84-8; 108-10-1; 108-88-3; 108-93-0; 108-94-1; 108-95-2; 109-52-4; 110-54-3; 111-27-3; 111-76-2; 112-34-5; 112-49-2; 117-81-7; 120-12-7; 122-60-1; 126-73-8; 129-00-0; 131-11-3; 132-64-9; 142-62-1; 142-96-1; 143-24-8; 149-57-5; 156-60-5; 206-44-0; 409-02-9; 501-52-0; 613-46-7; 617-94-7; 624-92-0; 626-93-7; 816-19-3; 865-66-7; 1300-71-6; 1319-73-9; 1319-77-3; 1321-94-4; 1330-20-7; 1333-07-9; 1907-65-9; 3073-92-5; 8013-00-1; 25322-20-7; 25323-89-1; 25567-10-6; 26523-64-8; 26638-03-9; 29299-43-2; 29387-86-8; 35915-22-1; 50874-76-5; 53535-33-4; 54518-04-6; 54972-97-3; 77110-32-8; 77110-33-9; 77110-34-0; 77110-35-1; 77110-36-2; 77110-37-3; 77110-38-4; 77110-39-5; 110-93-0; 815-24-7
EM - 8110

8 SI - CA/093/126429K
AU - Bolt HM ; Filser JG ; Laib RJ ; Ottenwaelder H
AD - Inst. Toxikol., Univ. Tuebingen, Tuebingen
TI - Binding kinetics of vinyl chloride and vinyl bromide at very low doses
SO - Arch. Toxicol., Suppl.; VOL 3, ISS Quant. Aspects Risk Assess. Chem. Carcinog, 1980,129-42
LA - ENG
CD - ATSUD
AB - CBAC COPYRIGHT: CHEM ABS A review and discussion with 55 refs.

on the mechanism and kinetics of hepatic covalent protein binding of vinyl chloride and vinyl bromide. (75-01-4 Vinyl chloride)(593-60-2 Vinyl bromide)
RN - 75-01-4; 593-60-2
EM - 8010

9 SI - CA/093/080083N
AU - Igarashi T ; Inai Y ; Kijima S ; Nakajima Y ; Yamatsu I
TI - Treating hypertension with polyprenyl alcohol ester
SO - U.S. PATENT NO. 4199587 04/22/80 (Eisai Co., Ltd.)
LA - ENG
AB - CBAC COPYRIGHT: CHEM ABS ADDENDUM Polyprenyl esters H(CH2CMe:CHCH2)nO2CR, where n = 8-11, R = C1-17 satd. or unsatd. aliph. group, cyclohexyl, Ph, or substituted Ph, are prepd. and used to treat hypertension. The compds. have less toxicity and side effects than previous antihypertensives. The esters were prepd. from the corresponding polyprenols. 3,7,11,15,19,23,27,31,35,39,43-Undecamethyl-2,6,10,14,18,22,26,30-,34,38,42-tetracontaundecaen-3-ol was prepd. by the Grignard reaction of vinyl chloride with decaprenylacetone. (70575-57-4 3,7,11,15,19,23,27,31,35,39,43-undecamethyl-2,6,10,14,18,22,26,30-,34,38,42-tetracontaundecaen-3-ol)(75-01-4 Vinyl chloride)(74423-84-0 decaprenylacetone) Pharmaceutical compns. were prepd. contg. 3,7,11,15,19,23,27,31,35-nonamethyl-2,6,10,14,18,22,26,30,34-hexa-contanonaenyl 2-(p-chlorophenoxy)-tert-butyrate. (74423-81-7 3,7,11,15,19,23,27,31,35-nonamethyl-2,6,10,14,18,22,26,30,34-hexa-contanonaenyl 2-(p-chlorophenoxy)-tert-butyrate)
RN - 70575-57-4; 75-01-4; 74423-84-0; 74423-81-7; 74-86-2; 70495-51-1; 70495-52-2; 70495-54-4; 70495-55-5; 70495-56-6; 70495-57-7; 70495-58-8; 70495-59-9; 70495-60-2; 70495-61-3; 70520-55-7; 74423-82-8; 70572-86-0
EM - 8105

10 SI - CA/093/224867W
AU - Jarosek K ; Jakubis M
AD - Povazske Chem. Zavody, n. p., Novaky
TI - Waste disposal in vinyl chloride production
SO - Chem. Prum.; VOL 30, ISS 5, 1980,256-7
LA - SLO
CD - CHPUA
AB - CBAC COPYRIGHT: CHEM ABS The most suitable disposal of waste gases contg. .ltoreq.5% (vol.) of vinyl chloride consists of absorption in C2H4Cl2 under moderate pressure and successive high pressure desorption of vinyl chloride from the solvent. (75-01-4 Vinyl chloride) Waste gases contg. 0 .ltoreq.5% (vol.) are combusted in a special oven and the HCl formed is absorbed either in H2O or adsorbed by a solid sorbent.
RN - 75-01-4
EM - 8101

11 SI - CA/093/224840G
AU - Krajewski J ; Gromiec J ; Dobecki M
AD - Inst. Occup. Med., Lodz
TI - Comparison of methods for determination of desorption efficiencies
SO - Am. Ind. Hyg. Assoc. J.; VOL 41, ISS 7, 1980,531-4
LA - ENG
CD - AIHAA
AB - CBAC COPYRIGHT: CHEM ABS Three methods for desorption efficiency detn. were compared with a ref. dynamic method for 12 compds. Only 1 of them gave values that were statistically different. The method, in which std. solns. of detd. compds. in CS2 are injected onto charcoal, is recommended to all labs. dealing with air anal. as it is simpler than the dynamic method. Independence of the desorption efficiency on charcoal loading was also confirmed. The desorption efficiencies for individual compds. and their mixts. were found to be different.
RN - 56-23-5; 67-64-1; 67-66-3; 71-36-3; 71-43-2; 75-01-4; 75-09-2; 108-05-4; 108-88-3; 108-94-1; 141-32-2; 141-78-6
EM - 8101

12 SI - CA/093/209565C
AU - Drugov YS ; Murav'eva GV ; Letunovskaya GA
TI - Quantitative determination of vinyl chloride impurities in air
SO - U.S.S.R. PATENT NO. 728081 04/15/80 (Leningrad Scientific-Research Institute of Industrial Hygiene and Occupational Diseases)
LA - RUS
AB - CBAC COPYRIGHT: CHEM ABS Vinyl chloride is detd. in air by concn. on activated C, elution with an org. solvent, and chromatog. of the eluate. (75-01-4 Vinyl chloride) The precision and selectivity of the detn. are increased by passing the sample through a column filled with mol. sieves and etched glass fiber before anal.
RN - 75-01-4
EM - 8012

13 SI - CA/093/209402X
AU - Vanko A ; Lukacovic L ; Kiss G ; Mikulas M
AD - Vysk. Ustav Petrochem., Novaky
TI - Problems in measurement of gaseous industrial air pollution by gas chromatography
SO - Chem. Prum.; VOL 30, ISS 5, 1980,253-6
LA - SLO
CD - CHPUA
AB - CBAC COPYRIGHT: CHEM ABS Special precautions needed for adapting conventional GC procedures for the detn. of trace components in worksite air are discussed, e.g., the problem of loss by sorption and/or condensation of the component on the walls of the sampling vessel, connecting tubing, injection syringe, etc., and the necessity for thorough flushing of the app. after calibration tests with std. samples of higher concns. For traces of vinyl chloride in air the flame ionization detector

was preferred because of its selectivity and high sensitivity for org. compds. (75-01-4 Vinyl chloride) For the spectrum of inorg. gases from oxidn. processes the thermocond. detector was satisfactory.
RN - 75-01-4
EM - 8012

14 SI - CA/093/198688S
AU - Glushchenko VI ; Fomenko VN ; Pavlenko GI ; Semiletkina NN
AU - Grodetskaya NS ; Pankratova GP ; Vorontsov RS ; Gracheva KM
AD - Inst. Gig. Tr. Profzabol., Moscow
TI - Chronic experimental toxicity of vinyl chloride
SO - Gig. Tr. Prof. Zabol.; ISS 9, 1980,44-6
LA - RUS
CD - GTPZA
AB - CBAC COPYRIGHT: CHEM ABS Rats exposed to 35.3 mg vinyl chloride/m3 in chronic expts. showed increased body wt., changes in carbohydrate metab. with reduced activity of the insulin app., increased no. of leukocytes, increased protein and chloride in the urine and reduced diuresis. (75-01-4 Vinyl chloride) Similar changes were seen at a concn. of 4.8 mg/m3. The cardiovascular system showed phasic changes. The histol. of the organs showed practically no changes at the lower concn. The nervous system was affected at the higher concn. The new recommended max. permissible concn. of vinyl chloride is 0.1-0.5 mg/m3.
RN - 75-01-4; 16887-00-6
EM - 8012

15 SI - CA/093/173626G
TI - Musk perfume substitute
SO - Jpn. Tokkyo Koho PATENT NO. 80 12408 04/02/80 (Takasago Perfumery Co., Ltd.)
LA - JPN
AB - CBAC COPYRIGHT: CHEM ABS Cyclohexadec-5-enone (I), a musk perfume substitute, was prepd. (37609-25-9 Cyclohexadec-5-enone) Thus, Grignard reaction of cyclododecane epoxide with H2C:CHCl gave 39% II (X = H, OH) which was oxidized by Jones reagent to give 69% II (X = O), followed by a further Grignard reaction with H2C:CHCl to give 95% II (X = CH:CH2, OH). (286-99-7 Cyclododecane epoxide)(75-01-4 Vinyl chloride) Air oxidn. of the latter 3 h at 210-20.degree. gave I.
RN - 37609-25-9; 286-99-7; 75-01-4; 37609-22-6; 37609-23-7; 35951-27-0; 123-69-3; 541-91-3; 542-46-1
EM - 8011

16 SI - CA/093/161913K
AU - Hopkins J
AD - BIBRA
TI - Vinyl chloride. Part 5. Mutagenicity in man
SO - Food Cosmet. Toxicol.; VOL 18, ISS 2, 1980,200-1
LA - ENG
CD - FCTXA
AB - CBAC COPYRIGHT: CHEM ABS A review with .apprx.12 refs. on the mutagenicity of vinyl chloride in man. (75-01-4 Vinyl chloride)
RN - 75-01-4
EM - 8011

17 SI - CA/093/155061Q
AU - Allen TL ; MacNab JR ; Jefferis RP II
AD - Stauffer Chem. Co., Delaware City
TI - VCM concentration in ambient air measurement using computer-controlled gas chromatographs
SO - Anal. Instrum.; VOL 18,, 1980,1-8
LA - ENG
CD - AINSB
AB - CBAC COPYRIGHT: CHEM ABS The design, implementation, and operation are described for a microcomputer system for automatically sequencing, measuring, alarming, and recording ambient air detn. for vinyl chloride from a gas chromatog. according to a sequence, which varies as alarm levels are sensed. (75-01-4 Vinyl chloride)
RN - 75-01-4
EM - 8011

18 SI - CA/093/172984K
TI - Recovery of halogenized vinyl compounds from waste gases
SO - Jpn. Tokkyo Koho PATENT NO. 80 04729 01/31/80 (Shin-Etsu Chemical Industry Co., Ltd.)
LA - JPN
AB - CBAC COPYRIGHT: CHEM ABS The title compds. are recovered by sorption with activated C in 2 zones followed by thermal desorption under vacuum in the 1st zone and with steam in the 2nd zone. Thus, a waste gas (120 m3/h) contg. 12.5 wt. % vinyl chloride (I) was passed through 2 columns (at 15.degree.) contg. 1.7 and 1.3 tons activated C, resp., to give an effluent contg. an undetectable amt. of I. (75-01-4 Vinyl chloride) After 8 h of operation, the I concn. in the effluent from the 1st column increased from an initial value of 80 to 1000 ppm. The 1st column was heated (125.degree.) under vacuum (200 mm, 2 h) and the I removed was recovered as a condensate. After 400 h, the I concn. in the effluent from the 2nd column reached .apprx.0.1 ppm; the column was heated (125.degree.), and steam (160 kg/h, 3 h) and N (1 m3/h, 1 h) were circulated through it. The I emission was then controlled at <0.1 ppm.
RN - 75-01-4; 7440-44-0
EM - 8011

19 SI - CA/093/172983J
TI - Recovery of vinyl or vinylidene halides from waste gases
SO - Jpn. Tokkyo Koho PATENT NO. 80 04730 01/31/80 (Shin-Etsu Chemical Industry Co., Ltd.)
LA - JPN
AB - CBAC COPYRIGHT: CHEM ABS The title compds. are recovered by sorption with activated C followed by desorption with steam, hot air, or hot inert gas under vacuum. Thus, a waste gas contg. 10 wt. % vinyl chloride (I) was passed through a column (contg. activated C) surrounded by a water jacket. (75-01-4 vinyl chloride) Steam was then introduced into the water jacket, the pressure in the column was maintained at 100 mm, and a stream of steam (1.2 kg/cm2) was circulated through the column for 2.5 h and fed to a condenser for sepn. of I. The treated waste gases contained .ltoreq.0.05 ppm I, and the sorption capacity of the C was maintained even after 1 yr of continual operation.
RN - 75-01-4; 7440-44-0
EM - 8011

20 SI - CA/093/100826N
AU - Confer RG
TI - Emission control method and system
SO - Can. PATENT NO. 1070641 01/29/80 (Exxon Research and Engineering Co.)
LA - ENG
AB - CBAC COPYRIGHT: CHEM ABS The system consists of the decompn. chamber housing a UV light source, a gas scrubber, and an exhaust gas monitor. Thus, the stack emissions contg. vinyl chloride, NO, H2S, and CS2 enter the decompn. chamber and are exposed to the UV irradn. at the intensity 3-6 W/L of plenum vol. at 615 nm for 20-50 s. The gases are then passed through the scrubber to remove the decompn. products including HCl, phosgene, and Cl2. The monitor samples the exhaust gas from the scrubber before release to the atm. The exhaust gases are recycled through the feedback to the decompn. chamber, when the pollutants concns. are less than the predetd. levels.
RN - 75-01-4; 75-15-0; 75-44-5; 7647-01-0; 7782-50-5; 7783-06-4; 10102-43-9
EM - 8009

21 SI - CA/093/100784X
AU - Gnesina EA ; Pshenitsyna AI
AD - Inst. Gig. Tr. Profzabol., Gorkiy
TI - Dynamics of the frequency of cardiac contractions and galvanic skin reflex during nocturnal sleep in patients with chronic occupational vinyl chloride poisoning
SO - Gig. Tr. Prof. Zabol.; ISS 5, 1980,39-42
LA - RUS
CD - GTPZA
AB - CBAC COPYRIGHT: CHEM ABS The differences in the heart contraction rate (R) and the galvanic skin reflex (G) obsd. at different sleep stages of patients with vinyl chloride poisoning

were correlated with the degree of their poisoning. (75-01-4 Vinyl choride) For patient with only incipient intoxication R and G were different for the different sleep stages, but for patients with severe, chronic intoxication nearly const. R and G values (considerably lower than for the normal subjects) were obsd.
RN - 75-01-4
EM - 8009

22 SI - CA/093/039112H
AU - Abbondandolo A
AD - Univ. Pisa, Pisa
TI - Collection and evaluation of data on mutagenic effects of environmental chemicals
SO - Comm. Eur. Communities, [Rep.] EUR; ISS EUR 6388, Environ. Res. Programme,, 1980,670-3
LA - ENG
CD - CECED
AB - CBAC COPYRIGHT: CHEM ABS A format was developed for assessing the mutagenicity of environmental chems., e.g., Hg and Cd compds. and pesticides. The general scheme for the collection of mutagenicity data included the type of genetic effect induced by the chem. and information on the test organism.
RN - 50-07-7; 50-18-0; 55-18-5; 60-57-1; 62-38-4; 72-20-8; 75-01-4; 100-57-2; 107-27-7; 107-28-8; 115-09-3; 123-88-6; 297-78-9; 309-00-2; 502-39-6; 543-90-8; 671-16-9; 1184-57-2; 1306-23-6; 3076-91-3; 7439-97-6; 7440-43-9; 7487-94-7; 7789-42-6; 7790-80-9; 10045-94-0; 10108-64-2; 10325-94-7; 17774-02-6; 18431-36-2
EM - 8009

23 SI - CA/093/038420V
AU - Pessayre D ; Wandscheer JC ; Descatoire V ; Dolder A ; Degott C
AU - Benhamou JP
AD - Unit Rech. Physiopathol. Hepatique, Hop. Beaujon, Clichy
TI - Cumulative effects of repeated doses of compounds transformed into reactive metabolites
SO - Biochem. Pharmacol.; VOL 29, ISS 7, 1980,1041-7
LA - ENG
CD - BCPCA
AB - CBAC COPYRIGHT: CHEM ABS Rat hepatic cytochrome P-450 concns. were not decreased by single doses of bromobenzene, trichloroethylene, or vinyl chloride (0.25, 1, and 0.5 mmol/kg, resp., i.p.), but were progressively decreased after daily administration for 3 days. (9035-51-2 cytochrome P-450)(108-86-1 Bromobenzene)(79-01-6 Trichloroethylene)(75-01-4 Vinyl chloride) Hepatic glutathione was decreased 4 h after a single dose of bromobenzene, but it was not decreased 24 h after a single or repeated doses. (70-18-8 Glutathione) The amt. of metabolite irreversibly bound to proteins progressively increased in the liver during repeated administration of the 3 drugs. Thus, daily administration of compds. transformed into reactive metabolites may lead to a progressive decrease in cytochrome P-450 concn. and to the accumulation of metabolites irreversibly bound to proteins

in the liver.
RN - 9035-51-2; 108-86-1; 79-01-6; 75-01-4; 70-18-8
EM - 8009

24 SI - CA/095/191833T
AU - Feiler HD ; Storch PJ ; Southworth R
AD - Burns Roe Ind. Serv. Corp., Paramus
TI - Organics in municipal sludges survey of forty cities
SO - Natl. Conf. Munic. Ind. Sludge Util. Disposal, [Pap.]; 1980,53-7
LA - ENG
CD - 460UA
AB - CBAC COPYRIGHT: CHEM ABS The survey is concerned with the occurrence and fate of 129 toxic inorg. and org. pollutants in wastewater treated in publicly owned treatment plants of 40 cities. Volatile toxic pollutants in the influent had a median loss of 72, base-neutral orgs. 37, and metals in the "total out" were 7% lower than the influent.
RN - 71-55-6; 75-01-4; 75-09-2; 79-01-6; 84-74-2; 85-68-7; 95-50-1; 100-41-4; 108-88-3; 117-81-7; 127-18-4; 156-60-5
EM - 8112

25 SI - CA/095/155659G
AU - Phillips MP
AD - Univ. Colorado, Boulder
TI - Chemical sensitization of an electron capture detector to weakly electron attaching compounds
SO - Diss. Abstr. Int. B 1981, 42(1), 196; 1980,95 pp.
LA - ENG
CD - DABBB
AB - CBAC COPYRIGHT: CHEM ABS A disser. Electron capture detector sensitization Vinyl chloride detn air chromatog Carbon monoxide detn air chromatog
RN - 75-01-4; 630-08-0; 10024-97-2
EM - 8111

26 SI - CA/095/137671A
AU - Stampfer JF ; Weeks RW Jr ; Ettinger HJ
AD - Los Alamos Sci. Lab., Los Alamos
TI - Respirator canister evaluation for selected organic vapors and sorbent performance against vinyl chloride
SO - Report; ISS LA-8560-MS,, 1980,40 pp.
LA - ENG
CD - D3REP
AB - CBAC COPYRIGHT: CHEM ABS The protection afforded by a com. org. vapor respirator canister against CHCl3, benzene, epichlorohydrin, acrylonitrile, propargyl alc., 1,2-dibromoethane, acrolein, chloromethyl Me ether, and N-nitrosodimethylamine was detd. (67-66-3 Chloroform)(71-43-2 Benzene)(106-89-8 Epichlorohydrin)(107-13-1 Acrylonitrile)(107-19-7 Propargyl alcohol)(106-93-4 1,2-dibromoethane)(107-02-8 Acrolein)(107-30-2 Chloromethyl methyl ether)(62-75-9 N-Nitrosodimethylamine) Six canisters simultaneously were challenged at 64 L/min with test atmospheres

of these compds. at 80 and <15% relative humidity (RH). Breakthrough vol. was defined as that vol. of air which passed through the canister before the downstream concn. was 1% of the challenge concn. Tests were continued until at least this concn. was attained or 16 h had elapsed, whichever occurred 1st. Under a moderate workload, these canisters should afford adequate protection against CHCl3, benzene, and acrylonitrile for at least 4 h, epichlorohydrin for at least 8 h, and the remaining compds. (except chloromethyl Me ether) for at least 16 h. Chloromethyl Me ether at 80% RH exhibited a min. penetration of 30% after only 34 min, and it appears that this and similar canisters will not provide adequate protection against atmospheres contg. this compd. charcoal and ambersorb 347 when used in respirator equipment, appear only marginally useful against vinyl chloride. (79079-38-2 ambersorb 347)(75-01-4 Vinyl chloride)

RN - 67-66-3; 71-43-2; 106-89-8; 107-13-1; 107-19-7; 106-93-4; 107-02-8; 107-30-2; 62-75-9; 79079-38-2; 75-01-4

EM - 8111

27 SI - CA/095/145060R

AU - Rickart R ; Appel KE ; Schwarz M ; Stoeckle G ; Kunz W

AD - Inst. Biochem., Dtsch. Krebsforschungszent., Heidelberg

TI - Correlations between primary effects of xenobiotics on liver cells in vitro and their mutagenicity and carcinogenicity in vivo

SO - Short-Term Test Syst. Detect. Carcinog., [Proc. Symp.]; 1980,179-89

LA - ENG

CD - 45OHA

AB - CBAC COPYRIGHT: CHEM ABS In a dose-dependent manner dimethylnitrosamine (DMN) alkylates proteins of mouse liver microsomes pretreated with phenobarbital, halothane, or 3-methylcholanthrene (3-MC). (62-75-9 Dimethylnitrosoamine) The alkylation rates of bases in mouse liver DNA in the presence of DMN are decreased by phenobarbital and 3-MC, and increased by SKF 525A and halothane. Pretreatment of the animals with phenobarbital decreased the no. of DMN-induced DNA breaks. (50-06-6 phenobarbital) A comparison of the ability of 22 compds. including drugs and food additives to covalently bind to DNA, induce DNA breakage, induce enzyme deficiency in the liver, and their carcinogenic potential is presented. Apparently, the inital effect of a carcinogen is a mutagenic one.

RN - 62-75-9; 50-06-6; 53-96-3; 55-18-5; 56-23-5; 58-15-1; 59-89-2; 60-11-7; 75-01-4; 151-67-7; 547-57-9; 915-67-3; 1162-65-8; 2347-72-0; 2706-28-7; 2783-94-0; 5632-47-3; 13073-35-3; 14797-65-0; 50926-81-3

EM - 8111

28 SI - CA/095/102431V
AD - Washington
TI - Principles of toxicological interactions associated with multiple chemical exposures
SO - Report; ISS Order No. AD-A093 809,, 1980,204 pp.
LA - ENG
CD - D8REP
AB - CBAC COPYRIGHT: CHEM ABS On a typical day, a US Coast Guard inspector may enter confined spaces on as many as 5 vessels. Because each of these ships may have carried different cargoes, an inspector could be exposed to a mixt. of vapors from 5 different chems. An inspector may be exposed almost daily to benzene, various nitriles, MeOH, caustic soda, CCl4 vinyl chloride, and NH3 with exposure time varying from a few minutes to 2 h. (71-43-2 Benzene)(67-56-1 Methyl alcohol)(75-01-4 Vinyl chloride) Although permissible levels (threshold limit values) have been established for these vapors and must be attained before marine personnel can enter a confined space, the Coast Guard has become increasingly concerned about the interactions that might accrue from these exposures and possibly result in deleterious health effects. A Panel on Evaluation of Hazards Assocd. with Maritime Personnel Exposed to Multiple Cargo Vapors was formed. This report is a 1st attempt to assess the added hazards, if any, to marine inspectors who are occupationally exposed to multiple chems.
RN - 71-43-2; 67-56-1; 56-23-5; 75-01-4; 1310-73-2; 7664-41-7
EM - 8110

29 SI - CA/095/048340Z
AU - Pavlova LA ; Sukharev YG ; Boldyrev VI
TI - Methods for Removal of Vinyl Chloride from Waste Gases in PVC Production
SO - 1980,12 pp.
LA - RUS
CD - BOOKA
AB - CBAC COPYRIGHT: CHEM ABS A book. Book vinyl chloride removal gas
RN - 75-01-4; 9002-86-2
EM - 8109

30 SI - CA/095/037123E
AU - Kiehs K ; Schwarz GU ; Adolphi H
TI - Carboxylic acid esters for pest control
SO - S. Afric... PATENT NO. 79 06502 12/31/80 (BASF A.-G.)
LA - ENG
AB - CBAC COPYRIGHT: CHEM ABS The carboxylic acid esters YCO2CHZCR1:CR2R3 [R1,R2, and R3 = H, halo, alkyl, or alkenyl; Y = 3-(2,2-dihalovinyl)-2,2-dimethylcyclopropyl or I; R4 = alkyl, alkenyl, alkynyl, or cycloalkyl; R5 = halo, alkyl, alkoxy, trihalomethyl, CN, or NO2; a = 0-3; Z = II or III; X = O, S, or CH2; R6, R7, and R8 = halo, alkyl, alkoxy, or haloalkyl; b, c, and d = 0-3] are insecticides and acaricides. Thus,

2,2-dimethyl-3-(2',2'-dibromovinyl)-cyclopropanecarboxylic acid 3-phenoxy-alpha-vinylbenzyl ester had a contact LD50 value of 0.014 mug to Musca domestica. (75279-49-1 2,2-dimethyl-3-(2',2'-dibromovinyl)-cyclopropanecarboxylic acid 3-phenoxy-.alpha.-vinylbenzyl ester) The synthesis of 24 compds. is given.

RN - 75279-49-1; 75-01-4; 598-73-2; 32832-95-4; 39515-51-0; 52314-67-7; 59952-40-8; 60148-63-2; 72083-99-9; 73436-50-7; 75279-50-4; 75279-51-5; 75279-52-6; 78144-40-8; 78144-41-9; 78144-42-0; 78144-43-1; 78144-44-2; 78144-45-3; 78144-46-4; 78144-47-5; 78144-48-6; 78144-49-7; 78144-50-0; 78144-51-1; 78144-52-2; 78144-53-3; 78144-54-4; 78144-55-5; 78144-56-6; 78144-57-7; 78144-58-8; 78144-59-9; 78163-73-2

EM - 8109

31 SI - CA/095/029316E
AU - Ackerman DG ; Haro MT ; Richard G ; Takata AM ; Weller PJ
AD - Environ. Eng. Div., TRW, Redondo Beach
TI - Health impacts, emissions, and emission factors for noncriteria pollutants subject to de minimis guidelines and emitted from stationary conventional combustion processes
SO - Report; ISS EPA-450/2-80-074; Order No. PB80-221237,, 1980,106 pp.
LA - ENG
CD - D8REP
AB - CBAC COPYRIGHT: CHEM ABS The report presents a literature survey of the health and ecol. effects assocd. with various air quality levels of noncriteria pollutants that are regulated under the Clean Air Act. These noncriteria pollutants include Be, Hg, asbestos, H2SO4 mist, vinyl chloride, H2S, MeSH, Me2S, Me2S2, CS2, and CS. (75-01-4 Vinyl chloride)(74-93-1 Methylthiol)(75-18-3 Dimethylsulfide)(624-92-0 Dimethyldisulfide)(75-15-0 Carbon disulfide)(2944-05-0 Carbon monosulfide) Nationwide emissions are estd. for each noncriteria pollutant with particular emphasis on contributions from fossil fuel combustion at stationary sources. Factors for quantifying emissions from fossil fuel combustion processes are discussed for each noncriteria pollutant.
RN - 75-01-4; 74-93-1; 75-18-3; 624-92-0; 75-15-0; 2944-05-0; 7439-97-6; 7440-41-7; 7664-93-9; 7783-06-4
EM - 8108

32 SI - CA/095/011681K
AU - Wagoner JK ; Infante PF ; Apfeldorf RB
AD - Environ. Defense Fund, Washington
TI - Toxicity of vinyl chloride and poly(vinyl chloride) as seen through epidemiologic observations
SO - J. Toxicol. Environ. Health; VOL 6, ISS 5-6, 1980,1101-7
LA - ENG
CD - JTEHD
AB - CBAC COPYRIGHT: CHEM ABS A review with many refs. Review vinyl chloride exposure toxicity PVC toxicity occupational exposure review
RN - 75-01-4; 9002-86-2

EM - 8108

33 SI - CA/094/213607F
AU - Krajewski J ; Miczarska A ; Dobecki M
AD - Zakl. Chem. Zanieczyszczen Powietrza, Inst. Pracy, Lodz
TI - Usefulness of different methods of air sampling for the evaluation of occupational exposure to vinyl chloride
SO - Med. Pr.; VOL 31, ISS 3, 1980,165-70
LA - POL
CD - MEPAA
AB - CBAC COPYRIGHT: CHEM ABS Vinyl chloride (I) concns. in air were measured in the polymn. room of a PVC plant. (75-01-4 Vinylchloride)(9002-86-2 Poly(vinyl chloride)) The stationary sampling of the air did not reflect the actual exposure of the individual workers in varing I levels, 1.9-209.5 mg m-3, depending on their occupational activity. Air sampling with the use of personal miniature pumps is necessary to obtain a reliable evaluation of individual exposures.
RN - 75-01-4; 9002-86-2
EM - 8107

34 SI - CA/094/213606E
AU - Krajewski J ; Dobecki M ; Milczarska A
AD - Zakl. Chem. Zanieczyszczen Powietrza, Inst. Pracy, Lodz
TI - Evaluation of the working atmospheres at the PVC plants
SO - Med. Pr.; VOL 31, ISS 2, 1980,149-53
LA - POL
CD - MEPAA
AB - CBAC COPYRIGHT: CHEM ABS The vinyl chloride (I) concns. in the air at 2 PVC plants in Poland were detd. (75-01-4 Vinyl chloride)(9002-86-2 Polyvinyl chloride) Before modernization of the plants, the concns. exceeded the max. permissible concn., i.e., 30 mg I/m3 air. Esp. in polymn. rooms and during autoclave cleaning, the PVC levels were occasionally higher than 200 and 1500 mg/m-3, resp. Hermetization of the polymn. processes and introduction of mech. cleaning of the autoclave considerably reduced the exposure of workers.
RN - 75-01-4; 9002-86-2
EM - 8107

35 SI - CA/094/213398P
AD - Research Triangle Park
TI - National emission standards for hazardous air pollutants
SO - Fed. Regist.; VOL 45, ISS 224, 1980,76346-54
LA - ENG
CD - FEREA
AB - CBAC COPYRIGHT: CHEM ABS The method for the detn. of vinyl chloride in stack gases is given in detail, with recent improvements. (75-01-4 Vinyl chloride)
RN - 75-01-4
EM - 8107

36 SI - CA/094/196820A
AU - Sudo Y ; Nakamura S ; Nagasaki S ; Oshima E
AD - Tokyo Natl. Tech. Coll., Tokyo
TI - Adsorption of vinyl chloride monomer on a natural zeolite
SO - Tokyo Kogyo Koto Semmon Gakko Kenkyu Hokokusho; VOL 12,, 1980,65-70
LA - JPN
CD - TKSHD
AB - CBAC COPYRIGHT: CHEM ABS Vinyl chloride in air was removed by natural zeolite, then the zeolite was regenerated by heating and steaming. (75-01-4 Vinyl chloride) Heating at >200.degree. deteriorated the adsorptivity, and the heating gave better adsorptivity than that by steaming.
RN - 75-01-4
EM - 8107

37 SI - CA/094/186640C
AU - Bolt HM ; Filser JG ; Wiegand M ; Buchter A ; Bolt W
AD - Inst. Toxicol., Univ. Tuebingen, Tuebingen
TI - Studies on liver microsomal metabolism and interaction of vinyl chloride and related compounds in relation to possible carcinogenicity
SO - Proc. Int. Congr. Occup. Health, 19th; VOL 1, ISS Chem. Hazards, 1980,369-77
LA - ENG
CD - 45KOA
AB - CBAC COPYRIGHT: CHEM ABS Halogenated ethylenes and Me chloroform inhibited aminopyrine demethylation much more than aniline hydroxylation in rat liver microsomes in vitro. (71-55-6 Methyl chloroform) Trans-1,2-Dichloroethylene caused the greatest inhibition of aminopyrene demethylation. (156-60-5 trans-1,2-Dichloroethylene) Apparently, different mechanisms were involved in aminopyrine demethylation inhibition by trans-1,2-dichloroethylene and vinylidene fluoride. (75-38-7 Vinylidene fluoride) Thus, halogenated ethylenes may interact with the hepatic drug-metabolizing monooxygenase system.
RN - 71-55-6; 156-60-5; 75-38-7; 74-85-1; 75-01-4; 75-02-5; 75-35-4; 79-01-6; 127-18-4; 156-59-2; 593-60-2
EM - 8107

38 SI - CA/094/179678T
AU - Khudobina GA ; Safonova IL
TI - Toxicity of vinyl chloride
SO - Khim. Prom-st. Rubezhom; ISS 9, 1980,39-60
LA - RUS
CD - KPRUD
AB - CBAC COPYRIGHT: CHEM ABS A review with 208 refs. Review toxicity vinyl chloride
RN - 75-01-4
EM - 8106

39 SI - CA/094/161861N
AU - Dobecki M ; Krajewski J
AD - Dep. Chem. Anal. Air Pollutants, Inst. Occup. Med., Lodz
TI - Gas chromatographic determination of vinyl chloride and vinyl acetate in the air at work places
SO - Chem. Anal. (Warsaw); VOL 25, ISS 3, 1980,351-7
LA - POL
CD - CANWA
AB - CBAC COPYRIGHT: CHEM ABS Air samples contg. CH2:CHCl and AcOCH:CH2 were adsorbed on activated C, desorbed with CS2, and analyzed with a column packed with 10% Carbowax 20 M on Chromosorb W AW DMCS. (75-01-4 Vinyl chloride)(108-05-4 Vinyl acetate) The carrier gas was N at 0.5-cm3/s and 60.degree. column temp. The method can det. 2.5 AcOCH:CH2 and 7.5 mg CH2:CHCl/m3.
RN - 75-01-4; 108-05-4
EM - 8106

40 SI - CA/094/144585H
AU - Altshuller AP
AD - EPA, Research Triangle Park
TI - Comments on the lifetimes of organic molecules in air
SO - U. S. Environ. Prot. Agency, Off. Res. Dev., [Rep.] EPA; ISS EPA-600/9-80-003, Proc. Conf. Methyl Chloroform Other Halocarbon Pollut.,, 1980,1/1-1/10
LA - ENG
CD - XPARD
AB - CBAC COPYRIGHT: CHEM ABS The lifetimes of halo hydrocarbons and other orgs. in air were given.
RN - 50-00-0; 64-17-5; 67-56-1; 67-66-3; 71-43-2; 71-55-6; 74-82-8; 74-83-9; 74-84-0; 74-85-1; 74-86-2; 74-87-3; 74-98-6; 75-00-3; 75-01-4; 75-09-2; 75-10-5; 75-28-5; 75-34-3; 75-37-6; 75-43-4; 75-45-6; 75-46-7; 75-68-3; 75-88-7; 78-78-4; 78-93-3; 79-01-6; 79-20-9; 106-93-4; 106-97-8; 107-06-2; 108-38-3; 108-67-8; 108-88-3; 110-54-3; 110-82-7; 115-07-1; 127-18-4; 141-78-6; 306-83-2; 463-82-1; 593-53-3; 593-70-4; 1649-08-7; 2837-89-0; 62309-51-7
EM - 8105

41 SI - CA/094/144493B
AU - Krajewski J ; Milczarska A ; Dobecki M
AD - Inst. Occup. Med. Text. Chem. Ind., Lodz
TI - Suitability of air sampling techniques for the evaluation of occupational exposure to toxic substances
SO - Gig. Tr. Prof. Zabol.; ISS 10, 1980,17-20
LA - RUS
CD - GTPZA
AB - CBAC COPYRIGHT: CHEM ABS The av. concn. (.hivin.x) was detd. of vinyl chloride (VC) in air, sampled by different techniques at the plant for the prodn. of PVC. (75-01-4 Vinyl chloride)(9002-86-2 PVC) The distribution of various sampling sites, the value of .hivin.x in air samples over different

operating zones (loading ramp, service bay, etc.), and variations in .hivin.x value over a period of 30 days were detd. The values of .hivin.x do not reflect adequately the extent of occupational hazard due to exposure to vc. The level of exposure (1.8-209.5 mg/m3 of air) was highly variable and depended on the kind of work performed.
RN - 75-01-4; 9002-86-2
EM - 8105

42 SI - CA/094/115233M
AU - Bogdanikowa B
AD - Zespol Klin., Inst. Med. Pracy, Lodz
TI - Pathomechanism of the disease caused by chronic exposure to vinyl chloride
SO - Przegl. Lek.; VOL 37, ISS 12, 1980,797-801
LA - POL
CD - PRLKA
AB - CBAC COPYRIGHT: CHEM ABS A review on vinyl chloride with regard to the title subject; 53 refs. (75-01-4 Vinyl chloride)
RN - 75-01-4
EM - 8105

43 SI - CA/094/108476Q
AU - Roessner P ; Sram RJ ; Novakova J ; Lambl V
AD - Inst. Hyg. Epidemiol., Prague
TI - Cytogenetic analysis in workers occupationally exposed to vinyl chloride
SO - Mutat. Res.; VOL 73, ISS 2, 1980,425-7
LA - ENG
CD - MUREA
AB - CBAC COPYRIGHT: CHEM ABS Preventative cytogenetic examns. of workers exposed to vinyl chloride monomer (I) indicate that, if the I concn. in the air of the work place is <10 mg/m3, no increase will develop in the no. of chromosomal aberrations depictable in peripheral lymphocytes of these workers.
RN - 75-01-4
EM - 8104

44 SI - CA/094/108463H
AU - Diehl W ; Grambow L ; Huneke KH
TI - Toxiwarn - a portable measuring and warning device for toxic gases
SO - Draeger Rev.; VOL 45,, 1980,39-52
LA - ENG
CD - DRARA
AB - CBAC COPYRIGHT: CHEM ABS The Toxiwarn is a measuring and warning instrument which operates in a continuous manner and uses a cassette contg. indicator paper which reacts specifically with a toxic substance. Tapes are available for NH3, Cl, HCl, HCN, H2S, NO2, COCl2, and vinyl chloride. (75-44-5 Phosgene)(75-01-4 Vinyl chloride) The user is warned acoustically and optically for .ltoreq.10 h, and av. concns. are read from a digital display after 2, 4, and 8 h.
RN - 75-44-5; 75-01-4; 74-90-8; 7647-01-0; 7664-41-7; 7782-50-5;

7783-06-4; 10102-44-0
EM - 8104

45 SI - CA/094/089380K
AU - Antonov G ; Spasovski M
AD - Inst. Gig. Profzabol., Sofia
TI - Study of some blood serum indexes in workers exposed to vinyl chloride
SO - Gig. Tr. Prof. Zabol.; ISS 8, 1980,47-8
LA - RUS
CD - GTPZA
AB - CBAC COPYRIGHT: CHEM ABS The exposure to vinyl chloride (I) of factory workers produces changes in the connective tissues of the body. (75-01-4 Vinyl chloride) The levels of hydroxyproline and hexosamines in blood serum of these workers are increased, demonstrating that I causes decompn. of collagens. (51-35-4 Hydroxyproline) These effect of I are masked in workers older than 50 yr by the onset of aging processes. Other diseases (e.g., rheumatism, arthritis, arteriosclerosis) also produce degrdn. of collagens and can mask the effect of I.
RN - 75-01-4; 51-35-4
EM - 8104

46 SI - CA/094/077927F
AU - Sharma RP ; Yakel HO ; Gehring PJ
AD - Toxicol. Program, Utah State Univ., Logan
TI - Immunotoxicologic studies with vinyl chloride in rabbits and mice
SO - Int. J. Immunopharmacol.; VOL 2, ISS 4, 1980,295-9
LA - ENG
CD - IJIMD
AB - CBAC COPYRIGHT: CHEM ABS The effects of vinyl chloride (VC) exposure on induced immunologic responses in rabbits are described. (75-01-4 Vinyl chloride) No consistent effect of VC exposure was noticed on skin reactivity to tuberculin or serum antitetanus titers in sensitized rabbits. VC produced no change in the no. of antibody secreting cells in the lymph nodes of immunized rabbits. An increase in the spontaneous splenic lymphocyte transformation in immunized rabbits was obsd. when the animals were exposed to VC. Two known metabolites of VC, thiodiglycolic acid and N-acetyl-S-(hydroxyethyl)cysteine produced little or not effect when added to mouse splenic lymphocyte cultures in vitro but in vivo administration of thiodiglycolic acid produced apparent immune stimulation in mice. (123-93-3 Thiodiglycolic acid)(15060-26-1 N-acetyl-S-(hydroxyethyl)cysteine) Thus, although VC may cause an apparent enhancement of immune reactivity, it does not alter the immunologic response to simultaneously administered antigens.
RN - 75-01-4; 123-93-3; 15060-26-1
EM - 8104

47 SI - CA/094/059525U
AU - Poncelet F ; De Meester C ; Duverger-Van Bogaert M
AU - Lambotte-Vandepaer M ; Roberfroid M ; Mercier M
AD - Sch. Pharm., Univ. Louvain, Brussels
TI - Influence of experimental factors on the mutagenicity of vinylic monomers
SO - Arch. Toxicol., Suppl.; VOL 4,, 1980,63-6
LA - ENG
CD - ATSUD
AB - CBAC COPYRIGHT: CHEM ABS Various exptl. conditions, modes of incubation, and the presence of different metabolic activating systems had a variable effect on the mutagenic potency of styrene, butadiene, acrylonitrile, and vinyl chloride on strains of Salmonella typhimurium. (100-42-5 Styrene)(106-99-0 Butadiene)(107-13-1 Acrylonitrile)(75-01-4 Vinyl chloride) Styrene had a mutagenic activity in plate incorporation tests only. Contrarily, the mutagenic effects of butadiene and vinyl chloride were only obsd. when assays were performed in gaseous atms., the latter in the absence of a metabolic activating system. Acrylonitrile was also mutagenic in the gaseous phase but, in addn., seemed to be the only compd. active after incubation in liq. medium. The increased mutagenic effects detected after pretreatment of rats and mice by these vinyl monomers raises the problem of hazards related to the consecutive exposure of humans to acrylonitrile vapors.
RN - 100-42-5; 106-99-0; 107-13-1; 75-01-4
EM - 8104

48 SI - CA/094/052024W
AU - Drugov YS ; Murav'eva GV
AD - Sci. Res. Inst. Labour Hyg. Prof. Des., Moscow
TI - Selective gas chromatographic determination of chlorinated hydrocarbons in air with preliminary removal of interfering impurities
SO - Zh. Anal. Khim.; VOL 35, ISS 7, 1980,1319-25
LA - RUS
CD - ZAKHA
AB - CBAC COPYRIGHT: CHEM ABS Vinyl chloride (I), CCl2:CClH, and CCl2:CCl2 can be detd. in air by gas chromatog. when their concns. are .gtoreq.0.05 mg/m3. (75-01-4 Vinyl chloride)(79-01-6 Trichlorethylene)(127-18-4 Tetrachloroethylene) Air contg. these compds. is drawn through a column packed with 3 sep. layers: zeolite 5A, glass fiber satd. with concd. H2SO4, and Na2CO3. This removes practically all org. compds., except org. halides. The air is next drawn through a cold trap contg. active carbon which absorbs org. halides. The carbon is extd. with PhCl and the exts. are gas chromatographed on a column filled with carbon black contg. 0.2% poly(ethylene glycol).
RN - 75-01-4; 79-01-6; 127-18-4
EM - 8103

49 SI - CA/094/035484D
AU - Marthinsson B ; Johansson J ; Eng ST
AD - Dep. Electr. Meas., Chalmers Univ. Technol., Goeteborg
TI - Air pollution monitoring with a computer-controlled carbon dioxide-laser long-path absorption system
SO - Opt. Quantum Electron.; VOL 12, ISS 4, 1980,327-34
LA - ENG
CD - OQELD
AB - CBAC COPYRIGHT: CHEM ABS A CO2-laser long-path absorption system has been developed. It is highly automated with computer-controlled laser-line selection and real-time data processing. The system was used to monitor C2H4 and vinyl chloride concns. over a petrochem. factory area. (74-85-1 Ethylene)(75-01-4 Vinyl chloride) The C2H4 concns. were <0.02-45 ppm. The vinyl chloride concns. were <0.05 ppm. Different path lengths from 20 to 2800 m were used. The min. detectable C2H4 concn. was typically 15 ppm.
RN - 74-85-1; 75-01-4
EM - 8103

50 SI - CA/094/042203Q
AU - Baird R ; Gute J ; Jacks C ; Jenkins R ; Neisess L ; Scheybeler B
AU - Van Sluis R ; Yanko W
AD - San Jose Creek Water Qual. Lab., County Sanit. Dist. Los Angeles County, Whittier
TI - Health effects of water reuse: a combination of toxicological and chemical methods for assessment
SO - Water Chlorination: Environ. Impact Health Eff.; VOL 3,, 1980,925-35
LA - ENG
CD - WCEED
AB - CBAC COPYRIGHT: CHEM ABS Chlorinated and unchlorinated samples from H2O reclamation plants and potable groundwater wells were concd. on a high-pressure macroreticular resin system and the orgs. removed from the resins were tested for mutagenicity by the Ames test. One of the 3 treatment facilities and 3 of the 10 wells exhibited mutagenesis. All of the chlorinated samples contained direct-acting mutagens. The mutagenic components were sepd. by high-performance liq. chromatog. and then, the gas chromatog.-mass spectroscopy was used to detect sp. mutagens from the water.
RN - 56-23-5; 67-66-3; 71-43-2; 75-01-4; 75-09-2; 75-25-2; 75-27-4; 75-34-3; 79-00-5; 79-01-6; 95-50-1; 106-46-7; 107-06-2; 108-88-3; 108-90-7; 124-48-1; 127-18-4
EM - 8103

51 SI - CA/093/031081B
AU - Krasnec J
AD - Natl. Cent. Atmos. Res., Boulder
TI - A direct and sensitive gas chromatographic method for selective measurement of vinyl chloride in ambient air. Comments
SO - Atmos. Environ.; VOL 14, ISS 3, 1980,391
LA - ENG
CD - ATENB
AB - CBAC COPYRIGHT: CHEM ABS A polemic in answer to E. Burghardt et al. (ibid 1979, 13, 1057-60) is given.
RN - 75-01-4
EM - 8008

52 SI - CA/093/031080A
AU - Burghardt E ; Van de Wiel HJ ; Oranje EJ ; Jeltes R
AD - Res. Inst. Environ. Hyg., TNO, Delft
TI - A direct and sensitive gas chromatographic method for selective measurement of vinyl chloride in ambient air. Reply to comments
SO - Atmos. Environ.; VOL 14, ISS 3, 1980,391-2
LA - ENG
CD - ATENB
AB - CBAC COPYRIGHT: CHEM ABS A polemic in answer to J. Krasnec (ibid.1980, 14, 391-2) is given. A gas chromatogram of synthetic air spiked with 13 ppb vinyl chloride confirms the lower detection limit of 2 ppb. (75-01-4 Vinyl chloride)
RN - 75-01-4
EM - 8008

53 SI - CA/093/020484J
AU - Bartsch H ; Montesano R
AD - Unit Chem. Carcinog., IARC, Lyon
TI - Prescreening of environmental and industrial chemicals in a series of short-term tests for the detection of potential carcinogens
SO - Comm. Eur. Communities, [Rep.] EUR; ISS EUR 6388, Environ. Res. Programme,, 1980,269-73
LA - ENG
CD - CECED
AB - CBAC COPYRIGHT: CHEM ABS The mutagenicity of 12 halo olefins and related epoxides in Salmonella typhimurium in descending order was; 3,4-dichlorobutene-1 > 2-chlorobutadiene (tech. grade) > 1-chlorobutadiene > vinyl bromide (VB) > vinylidene chloride > vinyl chloride (VC); marginal mtagenicity was detected in the presence of 1,1,2-trichloroethylene and 1,1-difluoroethylene, and none with tetrachloroethylene and vinyl acetate. (760-23-6 3,4-dichlorobutene-1)(126-99-8 2-chlorobutadiene)(627-22-5 1-Chlorobutadiene)(593-60-2 Vinyl bromide)(75-35-4 Vinylidene chloride)(75-01-4 Vinyl chloride)(79-01-6 1,1,2-Trichloroethylene)(75-38-7 1,1-difluoroethylene)(127-18-4 Tetrachloroethylene)(108-05-4 Vinyl acetate) In the presence of human liver fractions, VB, VC, vinylidene chloride, and 2-chlorobutadiene were converted into mutagens. No good

correlation was found between the mutagenic and alkylating activities of the compds. with 4-(4-nitrobenzyl)pyridine. However, good correlations were obsd. for VC, VB, and 2-chlorobutadiene when fortified mouse liver microsomes were added to the assays. Vapor of VC induced mutations in V79 Chinese hamster cells in the presence of liver supernatant from phenobarbitone-pretreated rats.
RN - 760-23-6; 126-99-8; 627-22-5; 593-60-2; 75-35-4; 75-01-4; 79-01-6; 75-38-7; 127-18-4; 108-05-4; 106-89-8; 764-41-0; 3583-47-9; 7763-77-1
EM - 8008

54 SI - CA/092/192236A
AU - Sal'nikova LS ; Kitsovskaya IA
AD - Inst. Gig. Tr. Profzabol., Moscow
TI - Effect of vinyl chloride on embryogenesis of rats
SO - Gig. Tr. Prof. Zabol.; ISS 3, 1980,46-7
LA - RUS
CD - GTPZA
AB - CBAC COPYRIGHT: CHEM ABS Inhalation of 4.8 or 35.5 mg vinyl chloride/m3, 4 h/day during the entire pregnancy, increased the percentage of rat fetuses with hemorrhages by 49.3 and 51.2%, resp. (75-01-4 Vinyl chloride) The antenatal action of 35.5 mg vinyl chloride/m3 inhibited the orientation reaction in male offspring, lowered their blood Hb, and decreased the wt. coeffs. of heart, liver, kidneys, and spleen. In female offspring, the heart wt. coeff. was decreased, the blood leukocyte level and the urine hippuric acid level raised, and sleep prolonged. The lower vinyl chloride level also caused a no. of changes in the offspring.
RN - 75-01-4
DTG - MAXIMUM PERMISSABLE LIMIT ; CHRONIC TOXIC DOSE
EM - 8007

55 SI - CA/092/175184Q
AU - Sheftel VO
AD - Vses. Nauchno-Issled. Inst. Gig. Toksikol. Pestits. Polimern. Plast. Mass, Kiev
TI - Hazards of vinyl chloride migration into water and foods
SO - Gig. Sanit.; ISS 2, 1980,63-5
LA - RUS
CD - GISAA
AB - CBAC COPYRIGHT: CHEM ABS A review with 13 refs. Review vinyl chloride food water
RN - 75-01-4
EM - 8006

56 SI - CA/092/123086Q
AU - Peter S ; Ungvary G
AD - Lab. Hum. Genet., State Inst. Hyg., Budapest
TI - Lack of mutagenic effect of vinyl chloride monomer in the mammalian spot test
SO - Mutat. Res.; VOL 77, ISS 2, 1980,193-6
LA - ENG
CD - MUREA
AB - CBAC COPYRIGHT: CHEM ABS Exposure of female mice on the 10th day of pregnancy to 12,000 mg/m3 (4600 ppm) atm. concn. of vinyl chloride (I) monomer for 5 h did not result in any abnormal morphol. in the offsprings. (75-01-4 Vinyl chloride) Midventral white spots occurred at a frequency of 2.8%, but this did not differ from the relative control value. Thus, no somatic gene mutations were induced by I monomer in mammals in vivo.
RN - 75-01-4
EM - 8005

57 SI - CA/092/105572R
AU - De Meester C ; Duverger-Van Bogaert M ; Lambotte-Vandepaer M
AU - Roberfroid M ; Poncelet F ; Mercier M
AD - Sch. Pharm., Univ. Louvain, Brussels
TI - Mutagenicity of vinyl chloride in the Ames test. Possible artifacts related to experimental conditions
SO - Mutat. Res.; VOL 77, ISS 2, 1980,175-9
LA - ENG
CD - MUREA
AB - CBAC COPYRIGHT: CHEM ABS Vinyl chloride (I) (2-20% in the atm.) had a concn.-dependent direct mutagenic activity against Salmonella typhimurium. (75-01-4 Vinyl chloride) The mutagenicity of I was strongly enhanced by a fortified metabolizing liver ext. The simultaneous presence of plates contg. the liver S 9 mixt. with plates without the liver ext. in the incubation dessicator enhanced the mutagenicity of I towards bacteria inoculated on the plates without S 9. The enhancement was even more pronounced when the S 9 mixt. had been obtained from mice that had been pretreated with an inducing agent, however, the results were affected by exptl. conditions, e.g., the amt. of volatile metabolites, dessicator vol., no. of plates, and compn. of the plates. The mutagenicity of I may be due to its metab. to proximate mutagens.
RN - 75-01-4
EM - 8004

58 SI - CA/096/011052B
CC - CA/159005
AU - Ciugudeanu M ; Metes L ; Zugravu E ; Colosi D ; Anca Z ; Gabor S
AU - Preda N ; Suciu I
AD - Inst. Igiena Sanatate Publ., Cluj-Napoca
TI - Study of the behavior of some serum enzymes in workers occupationally exposed to vinyl chloride
SO - Rev. Ig., Bacteriol., Virusol., Parazitol., Epidemiol.,

Pneumoftiziol., Ig.; VOL 28, ISS 3, 1979,237-42
PT - JOURNAL ARTICLE
CY - Rom.
LA - RUM
CD - RABID
AB - CBAC COPYRIGHT: CHEM ABS Serum enzyme vinyl chloride exposure;Blood serum Enzymes of, vinyl chloride exposure in relation to;Health hazard Of vinyl chloride exposure, blood serum enzymes in relation to Occupational
RN - 75-01-4; 9000-86-6; 9000-97-9; 9001-08-5; 9001-46-1; 9001-60-9; 9001-78-9; 9046-27-9
EM - 8204

59 SI - CA/091/180464Q
AU - Leleu MJ
AD - Inst. Natl. Rech. Secur., Paris
TI - Dangerous chemical reactions. 64. Halogenated hydrocarbons. Part 1
SO - Cah. Notes Doc.; VOL 96,, 1979,451-60
LA - FRE
CD - CNDIB
AB - CBAC COPYRIGHT: CHEM ABS ADDENDUM Explosive or similarly vigorous reactions between halogenated hydrocarbons and other chems. are described and referenced.
RN - 67-68-5; 74-83-9; 74-86-2; 74-87-3; 74-95-3; 75-00-3; 75-01-4; 75-09-2; 75-11-6; 75-28-5; 75-35-4; 75-45-6; 75-63-8; 75-69-4; 75-71-8; 75-73-0; 76-13-1; 76-14-2; 78-87-5; 79-38-9; 92-52-4; 95-50-1; 96-40-2; 98-56-6; 106-96-7; 107-06-2; 540-59-0; 593-61-3; 593-63-5; 624-61-3; 624-65-7; 624-74-8; 659-86-9; 821-10-3; 865-47-4; 1310-58-3; 1314-13-2; 1781-66-4; 1890-04-6; 2713-09-9; 6088-91-1; 7429-90-5; 7439-93-2; 7439-95-4; 7439-97-6; 7440-09-7; 7440-22-4; 7440-23-5; 7440-50-8; 7440-66-6; 7572-29-4; 7616-94-6; 7664-41-7; 7726-95-6; 7761-88-8; 7782-44-7; 7782-50-5; 10028-15-6; 10034-81-8; 10045-94-0; 10102-03-1; 10544-72-6; 11135-81-2; 16260-59-6; 16853-85-3; 17530-57-3; 25512-47-4; 27154-33-2; 44750-17-6; 53214-97-4; 15590-23-5
EM - 8007

60 SI - CA/095/102249S
AU - Knoll JE ; Midgett MR
AD - Environ. Monitoring and Support Lab., Environ. Prot. Agency, Research Triangle Park
TI - Quality assurance aspects of the collaborative testing of EPA Method 106 - determination of vinyl chloride from stationary sources
SO - Spec. Conf.: Qual. Assur. Air Pollut. Meas., [Proc.]; 1979,442-7
LA - ENG
CD - 45QDA
AB - CBAC COPYRIGHT: CHEM ABS Quality assurance procedures were applied to improve the value of data obtained in the collaborative testing of the EPA method 106, which is used at plants manufg. ethylene dichloride, vinyl chloride, and polyvinyl chloride and involves the extn. of an integrated gas sample from

an effluent stream and the measurement of the vinyl chloride content by gas chromatog. (107-06-2 Ethylene dichloride)(75-01-4 Vinyl chloride)(9002-86-2 Polyvinyl chloride) The techniques used in organizing the test, in the acquisition of data, and in data anal. are described. The results of both a lab. and a field test are presented, and the applicability is discussed.
RN - 107-06-2; 75-01-4; 9002-86-2
EM - 8110

61 SI - CA/094/196848R
AU - Belanger PL ; Elesh E
AD - Health Hazard Tech. Assist. Branch, Natl. Inst. Occup. Safety Health, Cincinnati
TI - Health evaluation and technical assistance, report No. HE 78-71-633, Kentile Floors, Inc., Brooklyn, New York [USA]
SO - Report; ISS NIOSH-HE-78-71-633; Order No. PB80-195308,, 1979,25 pp.
LA - ENG
CD - D8REP
AB - CBAC COPYRIGHT: CHEM ABS Environmental air sampling, medical interviews and evaluations, and observations of work practices were conducted on July 10, Sept. 25 and 26, and Oct. 23-25, 1978 to evaluate exposures to asbestos, asphalt, vinyl chloride, dyes, and pigments. (75-01-4 Vinyl chloride) The company employed 370 workers and an authorized employee representative requested the evaluation on behalf of approx. 75 affected employees. Three of 30 environmental air samples for asbestos (0.11, 0.11, and 0.12 fibers/cm3) exceeded the OSHA recommended criteria of 0.10 fibers/cm3. All other parameters tested were within recommended exposure limits. The only evidence of work related illness involved 1 case of contact dermatitis. NIOSH recommendations include proper use of exhaust ventilation, use of safety equipment in all operations, identification of carcinogenic chem., proper cleaning of the work clothes of men exposed to asbestos, and elimination of the use of dianisidine. (119-90-4 Dianisidine)
RN - 75-01-4; 119-90-4
EM - 8107

62 SI - CA/094/052097X
AU - Belanger PL ; Elesh E
AD - Natl. Inst. Occup. Saf. Health, Cincinnati
TI - Hazard evaluation and technical assistance report No. HE 78-73-612, Kentile Floors, Inc., Chicago, Illinois
SO - Report; ISS NIOSH-TR-HHE-78-73-612; Order No. PB80-161094,, 1979,26 pp.
LA - ENG
CD - D8REP
AB - CBAC COPYRIGHT: CHEM ABS An environmental and medical survey was conducted on June 26 and 27, and Aug. 19 to 22, 1978 at Kentile Floors, Incorporated, Chicago, Illinois at the request of an authorized employee representative to det. the potential exposure of 50 employees to asbestos, polynuclear arom.

hydrocarbons, vinyl chloride, talc, alpha-methyl styrene, and numerous org. and inorg. dyes and pigments used in the prodn. of vinyl asbestos and asphalt asbestos floor coverings. (75-01-4 Vinyl chloride)(14807-96-6 Talc)(98-83-9 .alpha.-Methyl styrene) The investigators recommend an inventory and periodic monitoring of toxic chem. and that employees be instructed on proper respirator use and other safety precautions. A canopy exhaust system should be installed, carcinogenic chem. should be identified and stored sep. from noncarcinogens, the ventilation exhaust systems should be inspected periodically, and workers potentially exposed to asbestos should change clothes and shower before leaving the workplace.

RN - 75-01-4; 14807-96-6; 98-83-9
EM - 8103

63 SI - CA/094/042439W
AU - Bolt HM ; Laib RJ ; Filser JG ; Ottenwaelder H ; Stoeckle G
AU - Buchter A ; Bolt W
AD - Inst. Toxikol., Univ. Tuebingen, Tuebingen
TI - Toxicological problems with brominated and fluorinated vinyl chloride analog monomers
SO - Krebsgefaehrdung Arbeitsplatz/Arbeitsmed. Kolloq., Ber. Jahrestag. Dtsch. Ges. Arbeitsmed., 19th; 1979,195-203
LA - GER
CD - 44URA
AB - CBAC COPYRIGHT: CHEM ABS In 10.3 L closed containers with O replenishment and CO2 removal, and stocked with 3 rats, the vinyl chloride concn. decreased linearly as a 0-order process from 1100 to 250 ppm within 6 h, and then decreased logarithmically as a 1st-order process, until vinyl chloride disappeared within the next 5.5 h. (75-01-4 Vinyl chloride) Vinyl bromide dissipation shifted from the 0- to 1st-order kinetics at 55 ppm and the metabolization was slower in the 0-order range. (593-60-2 Vinyl bromide) The rates of vinyl fluoride and vinylidene fluoride metabolization were 6 and 1% of the vinyl chloride metabolization rate, resp. (75-02-5 Vinyl fluoride)(75-38-7 vinylidene fluoride) The hepatocarcinogenic potential of vinylidene fluoride is low because of its slow metabolization.

RN - 75-01-4; 593-60-2; 75-02-5; 75-38-7
EM - 8103

64 SI - CA/094/025980Y
AU - Kucerova M ; Polivkova Z ; Batora J
AD - Inst. Dalsi Vzdelavani Lek. Farm., Prague
TI - Mutagenic and carcinogenic effects of vinyl chloride
SO - Prac. Lek.; VOL 31, ISS 6-7, 1979,249-52
LA - CZE
CD - PRLFA
AB - CBAC COPYRIGHT: CHEM ABS Workers exposed to 0-6000, and most frequently to 20-150, ppm vinyl chloride for 10-27 yr had 5.2% of lymphocytes with chromosomal aberrations compared with 1.8% in controls, and the no. of sister chromatid exchanges was increased from 9.41 to 13.80/lymphocyte. (75-01-4 Vinyl chloride)

Chromatid and chromatin breaks pervailed, and chromatid and chromosome exchanges also were frequent.
RN - 75-01-4
EM - 8103

65 SI - CA/094/019850Q
AU - Crider LB ; O'Mara MM ; Bowles RL
AD - Avon Lake Tech. Cent., BFGoodrich Chem. Div., Avon Lake
TI - A model for the diffusion of vinyl chloride monomer from PVC under various conditions of storage
SO - J. Vinyl Technol.; VOL 1, ISS 3, 1979,168-71
LA - ENG
CD - JVTED
AB - CBAC COPYRIGHT: CHEM ABS A computer optimized exp. design involving 24 expts. was used to obtain a math. model of vinyl chloride (I) emission from granular PVC during storage in sealed 55 gal drums. (75-01-4 Vinyl chloride)(9002-86-2 PVC) The design variables were temp. (T in .degree.F), ventilation rate (V in turnover/h), loading [L, (PVC vol.)/(storage vol.).times. 100], the initial concn. of I in resin (Co in ppm), and storage time (t). Then C = Co1.47L0.37V-1.56[T6.0 exp-(24.1 + .00031Tt), where C is the ppb of I in the space above PVC. The model was used to predict C in 3 different warehouses. Excellent agreement between the calcd. and actual C was obtained.
RN - 75-01-4; 9002-86-2
EM - 8102

66 SI - CA/093/224970Z
AU - Hasegawa H ; Sato M ; Okonogi K ; Shimaoka A ; Tsuruta H
AD - Natl. Inst. Ind. Health, Kawasaki
TI - Examination of workers in polymerization process of vinyl chloride monomer (VCM)
SO - Ind. Health; VOL 17, ISS 3, 1979,153-85
LA - ENG
CD - INHEA
AB - CBAC COPYRIGHT: CHEM ABS Data are given on the effects of occupational exposure to vinyl chloride monomer on blood pressure; serum guanosine triphosphate; blood catalase; blood platelets; reticulocytes; glutamic-oxalacetic transaminase, glutamic-pyruvic transaminase, alk. phosphatase, lactic dehydrogenase activity, lactic dehydrogenase isozyme activity, and lipids in the serum; vinyl chloride monomer in the blood; glycerides, free and total cholesterol; beta-lipoproteins; and fatty acids. (75-01-4 Vinyl chloride)(86-01-1 Guanosine triphosphate)(9001-05-2 Catalase)(9000-97-9 Glutamic-oxalacetic transaminase)(9000-86-6 Glutamic-pyruvic transaminase)(9001-78-9 Alk. phosphatase)(9001-60-9 Lactic dehydrogenase)(57-88-5 cholesterol)
RN - 75-01-4; 86-01-1; 9001-05-2; 9000-97-9; 9000-86-6; 9001-78-9; 9001-60-9; 57-88-5; 9002-86-2
EM - 8101

67 SI - CA/093/209369S
AU - Kenson RE
AD - Oxy-Catal., Inc., West Chester
TI - Toxic air pollution emission control with engineered systems
SO - Spec. Conf.: Control Specific (Toxic) Pollut., [Proc.]; 1979,255-62
LA - ENG
CD - 43SXA
AB - CBAC COPYRIGHT: CHEM ABS The review with no refs. covers engineered systems for control of air emissions, including methylene chloride, vinyl chloride monomer, and benzene. (75-09-2 Methylene chloride)(75-01-4 Vinyl chloride monomer)(71-43-2 Benzene)
RN - 75-09-2; 75-01-4; 71-43-2
EM - 8012

68 SI - CA/093/191284Y
AU - Haguenoer JM ; Frimat P ; Cantineau A ; Pollard F ; Bobowski R
AD - Inst. Med. Trav., Fac. Med., Lille
TI - Risks associated with vinyl chloride (MVC) and their prevention in a polymerization unit
SO - Arch. Mal. Prof. Med. Trav. Secur. Soc.; VOL 40, ISS 12, 1979,1115-30
LA - FRE
CD - AMPMA
AB - CBAC COPYRIGHT: CHEM ABS The concns. of vinyl chloride (I) in the air of a factory which went on stream in 1976 were, during the 1977-8 period, 0.30-0.40 ppm near the polymn. reactors, 0.05-2.75 ppm near I recovery units, and 0.06-1.60 ppm near the poly(vinyl chloride) driers. (75-01-4 Vinyl chloride)(9002-86-2 PVC) The high I concns. were due to tech. malfunctions. The factory workers, at that point, had not been affected by exposure to these I levels.
RN - 75-01-4; 9002-86-2
EM - 8012

69 SI - CA/093/144332C
AU - Scrima M
AD - Lab. Chim. Prov. Pesaro, Urbino
TI - A chemical hypothesis on the possible carcinogenicity of styrene
SO - G. Ital. Med. Lav.; VOL 1, ISS 3, 1979,131-2
LA - ITA
CD - GIMLD
AB - CBAC COPYRIGHT: CHEM ABS Structural analogies and reactivity of vinyl chloride and styrene are pointed out as possibly responsible for the similar carcinogenic effect of these compds. (75-01-4 Vinyl chloride)(100-42-5 Styrene)
RN - 75-01-4; 100-42-5
EM - 8011

70 SI - CA/093/078751K
AU - Miura T ; Nakamura S ; Matsunaga I ; Hayashi M ; Suenaka T
AU - Hirata M ; Hara I
AD - Osaka Prefect. Inst. Public Health, Osaka
TI - Industrial hygienic survey of factories processing poly(vinyl chloride) resin in Osaka
SO - Osaka-furitsu Koshu Eisei Kenkyusho Kenkyu Hokoku, Rodo Eisei Hen; VOL 17,, 1979,45-53
LA - JPN
CD - OFKIA
AB - CBAC COPYRIGHT: CHEM ABS The title survey covered extrusion, paste-processing, and injection molding plants over the Apr.-Dec. period in 1977. Contamination of environmental air by vinyl chloride monomer was .ltoreq.26 ppm. (75-01-4 Vinyl chloride)
RN - 75-01-4; 9002-86-2
EM - 8009

71 SI - CA/093/078620S
AU - Matsumura Y
AD - Sangyo Igaku Sogo Kenkyusho
TI - Adsorption of pollutants with activated carbon
SO - Kankyo Kagaku Tokubetsu Kenkyu Shinpojumu Yoshishu; VOL 1,, 1979,28-31
LA - JPN
CD - 43AZA
AB - CBAC COPYRIGHT: CHEM ABS Pollutants (e.g., chlorinated hydrocarbons, NOx, Hg vapors, and NH3) were adsorbed from air by surface-treated activated C in a dynamic gas-adsorption app. to study the adsorption characteristics. The org. pollutant-adsorption capacity of activated C was lowered by the presence of moisture in the air sample. Compared to triethanolamine-silica gel, zeolite, and silica gel, the initial NOx-adsorption rate was greater for activated C. (102-71-6 Triethanolamine) When the activated C was modified by treatment with liq. oxidants (e.g., acidic K2Cr2O7 soln.), the sorption of Hg vapors and NH3 increased.
RN - 102-71-6; 56-23-5; 75-00-3; 75-01-4; 75-35-4; 109-66-0; 110-54-3; 111-65-9; 142-82-5; 7439-97-6; 7440-44-0; 7664-41-7; 7778-50-9; 11104-93-1
EM - 8009

72 SI - CA/093/031103K
AU - Leichnitz K
TI - Some information on the long-term measuring system for gases and vapors
SO - Draeger Rev.; VOL 43,, 1979,6-13
LA - ENG
CD - DRARA
AB - CBAC COPYRIGHT: CHEM ABS Draeger tubes, used with pumps to detect 16 gaseous pollutants (e.g., CO, SO2, and hydrocarbons) in the workplace over long periods (4-8 h), as described, including the indicating reactions that occur in the tubes, interfering

compds., and appropriate pollutant concn. ranges.
RN - 71-43-2; 74-90-8; 75-01-4; 79-01-6; 108-88-3; 124-38-9; 126-99-8; 630-08-0; 7446-09-5; 7647-01-0; 7664-41-7; 7782-50-5; 7783-06-4; 10102-44-0; 11104-93-1
EM - 8008

73 SI - CA/093/031007G
AU - Ichibashi M
AD - Kawasaki Munic. Res. Inst. Environ. Prot., Kawasaki
TI - The real status of air pollution. 2. Atmospheric organic compounds in Kawasaki
SO - Kanagawa-ken Taiki Osen Chosa Kenkyu Hokoku; VOL 21,, 1979,131-43
LA - JPN
CD - KTOHD
AB - CBAC COPYRIGHT: CHEM ABS Atm. org. compds. in Kawasaki were detd. by gas chromatog.-mass spectroscopy and mass fragmentog. Halogenated hydrocarbons detd. included Freon 11, Freon 113, CH2:CCl2, CCl2CH3, ClCH:CCl2, Cl2C:CCl2, and chloroprene. (75-69-4 Freon 11)(76-13-1 Freon 113)(75-35-4 1,1-Dichloroethene)(71-55-6 1,1,1-Trichloroethane)(79-01-6 Trichloroethylene)(127-18-4 Tetrachloroethylene)(126-99-8 Chloroprene)
RN - 75-69-4; 76-13-1; 75-35-4; 71-55-6; 79-01-6; 127-18-4; 126-99-8; 56-23-5; 67-66-3; 75-00-3; 75-01-4; 75-09-2; 75-34-3; 75-71-8; 78-87-5; 79-00-5; 156-59-2
EM - 8008

74 SI - CA/093/020474F
AU - Scott BR
AD - Inhalation Toxicol. Res. Inst., Lovelace Biomed. Environ. Res. Inst., Inc., Albuquerque
TI - A new dose-response model for estimating lifetime tumor risks
SO - Annu. Rep. Inhalation Toxicol. Res. Inst. (Lovelace Biomed. Environ. Res. Inst.); 1979,107-10
LA - ENG
CD - AITRD
AB - CBAC COPYRIGHT: CHEM ABS A tumorgenesis model is described in which damage to a single intracellular locus can lead to a tumorgenic cellular transformation. Assuming a large no. of independent intracellular loci to be at risk and assuming that damage to a locus sufficient to cause a tumorgenic transformation occurs with probability >0 for all doses >0 leads to the use of the Weibull distribution to characterize the probability of a tumorgenic cellular transformation occurring after exposure to a given dose of carcinogen. The increase in the lifetime tumor incidence above the spontaneous incidence is characterized by a tumor incidence function that represents the probability of occurrence of .gtoreq.1 tumorgenic cellular transformations among N(D) independent surviving cells per individual, after exposure to a dose D of carcinogen. The tumor incidence function is fitted to data for the displacement of the tumor incidence above the control incidence after exposure of humans to 226Ra and 228Ra, after long-term oral exposure of animals to dieldrin or

dimethylnitrosamine and after long-term inhalation exposure of animals to vinyl chloride. (60-57-1 Dieldrin)(62-75-9 Dimethylnitrosamine)(75-01-4 Vinyl chloride)
RN - 60-57-1; 62-75-9; 75-01-4; 13982-63-3; 15262-20-1
EM - 8008

75 SI - CA/092/202856U
AU - Doniger DD
TI - The Law and Policy of Toxic Substances Control: A Case Study of Vinyl Chloride
SO - 1979,179 pp.
LA - ENG
CD - BOOKA
AB - CBAC COPYRIGHT: CHEM ABS A book. Book vinyl chloride toxicity law
RN - 75-01-4
EM - 8007

76 SI - CA/093/001946V
AU - Bartsch H ; Sabadie N ; Malaveille C ; Camus AM
AU - Richter-Reichhelm HB
AD - Unit Chem. Carcinog., Int. Agency Res. Cancer, Lyon
TI - Carcinogen metabolism with human and experimental animal tissues: inter-individual and species differences
SO - Adv. Med. Oncol., Res. Educ., Proc. Int. Cancer Congr., 12th; VOL 3,, 1979,179-87
LA - ENG
CD - 42WTA
AB - CBAC COPYRIGHT: CHEM ABS Liver fractions obtained from surgery tissue samples of different human subjects were shown to convert vinyl chloride or related haloolefins and several N-nitroso derivs. into alkylating and mutagenic intermediates. (75-01-4 Vinyl chloride) Although large individual variations were obsd., the av. activity was lower or close to mouse or rat liver fractions. However, with N-nitroso-N'-methylpiperazine, human liver samples were up to 40 times more active than rat liver. When hepatic benzo[a]pyrene hydroxylase (BP hydroxylase) activity in samples from different human subjects was plotted against the liver microsome-mediated mutagenicity, a pos. correlation was obtained between the rates of oxidative BP metab. and mutagenicity in the presence of N-nitrosomorpholine or vinyl chloride as substrate. (16339-07-4 N-Nitroso-N'-methylpiperazine)(9037-52-9 benzo[a]pyrene hydroxylase)(59-89-2 N-Nitrosomorpholine) Therefore, BP hydroxylase activity in normal and tumorous lung tissue from 76 patients with lung tumors was measured. A 60-fold interindividual variation was noted with the rates of BP hydroxylation in tumorous lung tissue lower than in normal tissue of the same patient. When BP hydroxylase activity in the tumorous tissue was plotted vs. the no. of cigarets smoked per day prior to surgery, a neg. correlation was apparent. Thus, differences in carcinogenic metab. may condition in part the response of human individuals when exposed to the same level of

environmental carcinogens.
RN - 75-01-4; 16339-07-4; 9037-52-9; 59-89-2; 75-35-4; 100-75-4; 126-99-8; 593-60-2; 764-41-0; 930-55-2
EM - 8007

77 SI - CA/092/185162V
TI - Determination of vinyl chloride in gases
SO - Neth. Appl. PATENT NO. 78 04545 10/30/79 (Auergesellschaft G.m.b.H.)
LA - DUT
AB - CBAC COPYRIGHT: CHEM ABS Thermal hydrolysis of vinyl chloride (I) at .apprx.580.degree., in the presence of H2O vapor, is const. at 85% (in the 5-50 ppm range) and is used in the detn. of I in gas mixts. (75-01-4 Vinyl chloride) One part of the process-stream sample is thermally hydrolyzed at .apprx.580.degree. and the other part at <450.degree.. The hydrolysis products are washed with H2O and the elec. resistances of both aq. solns. are measured. The difference is a direct measure of I.
RN - 75-01-4
EM - 8006

78 SI - CA/092/185015Z
AU - Lee K ; Hansen JL ; Macauley DC
AD - Union Carbide Corp., South Charleston
TI - Predictive model of the time-temperature requirements for thermal destruction of dilute organic vapors
SO - Proc., Annu. Meet. - Air Pollut. Control Assoc.; VOL 72nd, ISS 1, 1979,Paper No. 79-10.1, 16 pp.
LA - ENG
CD - PRAPA
AB - CBAC COPYRIGHT: CHEM ABS The thermal destruction efficiency of dil. org. vapors using thermal oxidizers is presented. Quant. kinetics data necessary to design and predict the performance of thermal oxidizers to assure carcinogenic and other toxic chems. are completely destroyed is used to replace the rule-of-thumb basis. A continuous plug-flow reactor was used to obtain thermal oxidn. kinetics data for compds. of several structural classes. Statistical anal. of the data gives equations that predict the residence time and temp. required to destroy a compd. based solely on mol structure and autoignition temp. The equations present and approach for estg. incineration conditions for a wide variety of compds. with little or no exptl. data.
RN - 64-17-5; 71-43-2; 74-82-8; 74-84-0; 74-85-1; 74-98-6; 75-01-4; 107-02-6; 107-06-2; 107-13-1; 108-88-3; 115-07-1; 121-44-8; 140-88-5; 25167-67-3
EM - 8006

79 SI - CA/092/184996H
AU - Kenson RE
AD - Oxy-Catal., West Chester
TI - Engineered systems for the control of toxic chemical emissions
SO - Proc., Annu. Meet. - Air Pollut. Control Assoc.; VOL 72nd, ISS 2, 1979,Paper No. 17.4, 15 pp.
LA - ENG
CD - PRAPA
AB - CBAC COPYRIGHT: CHEM ABS The design of engineered systems for control of vinyl chloride emissions in PVC plants and for benzene control in petrochem. operations is described. (75-01-4 Vinyl chloride)(9002-86-2 PVC)(71-43-2 Benzene) Using the engineered systems approach, toxic emission control systems which readily meet stringent emission stds. were developed which are more cost-effective than std. systems.
RN - 75-01-4; 9002-86-2; 71-43-2
EM - 8006

80 SI - CA/092/184914E
AU - Ruiz Alonso C
TI - Vinyl chloride, its harmful effects and analytical control
SO - Rev. Fac. Farm. Univ. Cent. Venez.; VOL 44,, 1979,37-64
LA - SPA
CD - RFFVA
AB - CBAC COPYRIGHT: CHEM ABS The manuf. and uses of poly(vinyl chloride) plastics and air pollution, carcinogenicity, and anal. detection of vinyl chloride by gas chromatog. are reviewed with 18 refs. (9002-86-2 Poly(vinyl chloride))(75-01-4 Vinyl chloride)
RN - 9002-86-2; 75-01-4
EM - 8006

81 SI - CA/092/168373X
AU - Huebenett F
AD - E. Merck, Darmstadt
TI - Experiences in the handling of toxic substances using an emission-free technique
SO - Ber. Int. Kolloq. Verhuetung Arbeitsunfaellen Berufskr. Chem. Ind.; VOL 6th,, 1979,405-20
LA - GER
CD - BIKID
AB - CBAC COPYRIGHT: CHEM ABS Emission-free handling of toxic substances is achieved by suitable instrumentation and design, particularly the use of remote control, sep. treatment of offgases and room air in scrubbers, and the use of app. of different sizes. These methods enabled the safe handing of carcinogenic (ClCH2)2O, MeSH, and vinyl chloride. (542-88-1 Bis(chloromethyl) ether)(74-93-1 Methanethiol)(75-01-4 Vinyl chloride) The flexibility of the system, used solely in process development, is increased by a suitably equipped lab. and by addnl. portable equipment, e.g. for vacuum generation.
RN - 542-88-1; 74-93-1; 75-01-4
EM - 8006

82 SI - CA/092/158483U
AU - Pessayre D ; Wandscheer JC ; Descatoire V ; Dolder A ; Benhamou JP
AD - Unite Rech. Physiopathol. Hepat., Hop. Beaujon, Clichy
TI - Effects of inducers on the in vivo covalent binding of a vinyl chloride metabolite to liver fractions
SO - Biochem. Pharmacol.; VOL 28, ISS 24, 1979,3667-8
LA - ENG
CD - BCPCA
AB - CBAC COPYRIGHT: CHEM ABS In rats, covalent binding of a metabolite following i.p. injection of vinyl chloride (I) (500 mumol/kg) by liver microsomal proteins and 100,000 g supernatant proteins was decreased similarly by SKF 525A pretreatment (75 mg/kg, i.p. 15 min before I). (75-01-4 Vinyl chloride) However, pretreatment with DDT (200 mg/kg, i.p.) or phenobarbital (100 mg/kg i.p.) increased in vivo binding to microsomal protein, but not to 100,000 g supernatant proteins. Irreversible binding of vinyl-14C chloride material to liver, blood, kidney, spleen, and muscle was decreased by SKF 525A pretreatment, whereas phenobarbital increased binding in all these organs and DDT increased binding only in liver and muscle. Thus, a compartmentalized model of vinyl chloride metab. is substantiated.
RN - 75-01-4
EM - 8006

83 SI - CA/092/152259D
AU - Czernielewski A ; Kiec-Swierczynska M ; Gluszcz M ; Wozniak L
AD - Klin. Dermatol., Lodz
TI - Pathological skin lesions in workers with long-time exposure to vinyl chloride
SO - Przegl. Dermatol.; VOL 66, ISS 5, 1979,463-9
LA - POL
CD - PRDEA
AB - CBAC COPYRIGHT: CHEM ABS Extensive investigations have shown that histopathol. examn. of skin samples collected from the extremities of workers subjected to long-time exposure to vinyl chloride represents the basic method by which the effects of such exposure can be detd. (75-01-4 Vinyl chloride) Histol. skin changes seem to be the earliest symptoms of chronic poisoning caused by the toxicity of vinyl chloride, and they can be recognized before any clin. symptoms become noticeable.
RN - 75-01-4
EM - 8005

84 SI - CA/092/152256A
AU - Jedrychowski W ; Prochowska K ; Garlinska J ; Bruzgielewicz J
AD - Inst. Med. Spolecznej, Akad. Med., Krakow
TI - Occurrence of chronic nonspecific diseases of the respiratory tract in workers of a vinyl resin plant
SO - Przegl. Lek.; VOL 36, ISS 9, 1979,679-82
LA - POL
CD - PRLKA
AB - CBAC COPYRIGHT: CHEM ABS In a vinyl resin plant 456 workers

(313 men and 143 women) were examd. for the presence of chronic nonspecific diseases of the respiratory tract (CNDRT). Although the percentage of chronic bronchitis was higher in the vinyl chloride (I) and vinyl acetate (II) departments, and the fast respiratory vol. in 1 s index in groups of workers employed in the II polymer department was significantly different from that found in workers employed in the I-II copolymer department, the relation between the occurrence of CNDRT and the work-environment concns. of I and II remains an open question. (75-01-4 Vinyl chloride)(108-05-4 Vinyl acetate)(9003-20-7 Polyvinyl acetate)(9003-22-9 Vinyl chloride-vinyl acetate copolymer) Since acetaldehyde, MeOH, and NH3 are also present in the departments investigated, it is possible that the combined effect of all the above compds. results in damage to the lung function and facilitates the occurrence of CNDRT. (75-07-0 Acetaldehyde)(67-56-1 Methanol)

RN - 75-01-4; 108-05-4; 9003-20-7; 9003-22-9; 75-07-0; 67-56-1; 7664-41-7
EM - 8005

85 SI - CA/092/152102X
AU - Sadowski S ; Strusinski A
AD - Zakl. Hig. Komunalnej, Panstw. Zakl. Hig., Warsaw
TI - Determination of low concentrations of vinyl chloride in air
SO - Rocz. Panstw. Zakl. Hig.; VOL 30, ISS 4, 1979,413-19
LA - POL
CD - RPZHA
AB - CBAC COPYRIGHT: CHEM ABS The method is based on adsorption of vinyl chloride on activated charcoal with subsequent desorption by CS2. (75-01-4 Vinyl chloride) The vinyl chloride is detd. by gas chromatog. applying a flame-ionization detector. The lowest amt. of vinyl chloride which could be detd. in this way was 0.1 ng.
RN - 75-01-4
EM - 8005

86 SI - CA/092/134672D
AU - Benson JS
AD - B. F. Goodrich Chem. Div., Cleveland
TI - Catoxid for chlorinated byproducts
SO - Hydrocarbon Process.; VOL 58, ISS 10, Sect. 1, 1979,107-8
LA - ENG
CD - HYPRA
AB - CBAC COPYRIGHT: CHEM ABS Chlorinated hydrocarbon wastes, from the vinyl chloride plant, are oxidized by air in a fluidized bed catalytic reactor at <1000.degree.F. (75-01-4 Vinyl chloride) The reactor effluent contains HCl, H2O, N, O, and C oxides. Heat of combustion is recovered by circulating boiler-feed water through coils in the fluidized bed.
RN - 75-01-4; 7647-01-0
EM - 8005

87 SI - CA/092/134520C
AU - Mizerski J ; Wedrychowicz A ; Maslanka-Kowalczyk D ; Pituch A
AU - Labza H
AD - Inst. Pediat., Akad. Med., Krakow
TI - Immunological studies of workers exposed to vinyl chloride
SO - Przegl. Lek.; VOL 36, ISS 9, 1979,665-8
LA - POL
CD - PRLKA
AB - CBAC COPYRIGHT: CHEM ABS Studies of certain immunol. indicators in workers exposed to vinyl chloride disclosed increased levels of IgA and T lymphocyte nos., both relative and abs.; this was particularly noticeable in workers handling the copolymn. process. (75-01-4 Vinyl chloride) The pathol. and clin. significance of the above findings is discussed.
RN - 75-01-4
EM - 8005

88 SI - CA/092/134519J
AU - Milkowski A ; Kiec E ; Banak D ; Wedrychowicz A ; Popiela T
AU - Koscielny I
AD - Akad. Med., Krakow
TI - Vascular alterations in workers exposed to vinyl chloride
SO - Przegl. Lek.; VOL 36, ISS 9, 1979,661-4
LA - POL
CD - PRLKA
AB - CBAC COPYRIGHT: CHEM ABS Examn. of 34 workers whose jobs exposed them to the action of vinyl chloride involved such tests as skin thermometry and photoplethysmog., combined with the hand cooling and pressure test. (75-01-4 Vinyl chloride) In addn., the rate of pulse wave propagation in the aorta and the upper right extremity was detd. Photoplethysmog. functional changes were obsd. in all subjects studied. In 89% of the examd. workers skin thermometry revealed a prolongation of the recovery time, 73% showed an increase rate of pulse wave propagation in the upper right extremity, and 50% in the aorta.
RN - 75-01-4
EM - 8005

89 SI - CA/092/134518H
AU - Popiela T ; Szybinski Z ; Wedrychowicz A ; Huszno B ; Stachura J
AU - Dura K ; Billewicz O
AD - Akad. Med., Krakow
TI - Results of clinical studies in workers exposed to vinyl chloride
SO - Przegl. Lek.; VOL 36, ISS 9, 1979,651-60
LA - POL
CD - PRLKA
AB - CBAC COPYRIGHT: CHEM ABS Clin. examn. of 30 of the 168 subjects, whose work exposed them to the toxic effects of vinyl chloride, involved such tests as scintigraphy of the liver, selective arteriog. of the liver artery, reverse cholangiopancreatog., and biopsy of the liver. (75-01-4 Vinyl chloride) Neither scintigraphic nor histol. or histochem.

changes of the liver paralleled the biochem. changes disclosed by specific tests. Among the biochem. tests, the most useful proved to be the bromosulfophthalein test and the detn. of the alk. phosphatase level in the serum. (9001-78-9 Alk. phosphatase) Scintigraphy of the liver is considered to be useful as a screening test only.
RN - 75-01-4; 9001-78-9
EM - 8005

90 SI - CA/092/134517G
AU - Szybinski Z ; Popiela T
AD - Klin. Endokrynol. Przem. Mater., Akad. Med., Krakow
TI - Principles of a multistage research program on the toxic effects of vinyl chloride and mercury vapors
SO - Przegl. Lek.; VOL 36, ISS 9, 1979,645-9
LA - POL
CD - PRLKA
AB - CBAC COPYRIGHT: CHEM ABS A no. of biochem. and clin. tests were conducted on 168 subjects engaged in the prodn. and polymn. of vinyl chloride and on 236 subjects, whose involvement in the prodn. of Cl2 (by the electrolysis of NaCl) and of acetaldehyde caused them to be exposed to Hg vapors. (75-01-4 Vinyl chloride)(75-07-0 Acetaldehyde) The purpose of this study has been to det. the extent to which the workers suffered from the exposure to the toxic effects of vinyl chloride or of Hg vapors and to develop some basic measures for the prevention of such harmful exposure.
RN - 75-01-4; 75-07-0; 7439-97-6; 7782-50-5
EM - 8005

91 SI - CA/092/123080H
AU - Lutz WK ; Schlatter C
AD - Inst. Toxicol., Univ. Zurich, Schwerzenbach
TI - In vivo covalent binding of chemicals to DNA as a short-term test for carcinogenicity
SO - Arch. Toxicol.; ISS Suppl. 2, 1979,411-15
LA - ENG
CD - ARTOD
AB - CBAC COPYRIGHT: CHEM ABS The detn. of covalent binding of radioactive chems. to DNA in intact mammalian organisms is proposed as a short-term test for carcinogenicity. The effectiveness of covalent binding to rat liver DNA correlated well with the hepatocarcinogenicity detected in long-term bioassays. The binding indexes ranged over more than five orders of magnitude between that of the strongest hepatocarcinogen tested, aflatoxin B1 (I), and the limit of detection of binding with 100 muCi 14C-labeled chems. (1162-65-8 aflatoxin B1) The order of magnitude of binding was therefore a good quant. measure for carcinogenicity. The pattern of DNA binding sites was important, esp. for small alkylating agents where the detn. of total binding might indicate a higher carcinogenic potency than was actually obsd.
RN - 1162-65-8; 50-32-8; 51-79-6; 53-16-7; 53-96-3; 57-63-6; 60-11-7;

62-75-9; 71-43-2; 75-01-4; 81-07-2; 108-88-3; 930-55-2; 6795-23-9
EM - 8005

92 SI - CA/092/122911T
AU - Krahn DF
AD - Haskell Lab. Toxicol. Ind. Med., E. I. du Pont de Nemours and Co., Wilmington
TI - Utilization of the CHO/HGPRT system: metabolic activation and method for testing gases
SO - Banbury Rep.; VOL 2, ISS Mamm. Cell Mutagen.: Maturation Test Syst., 1979,251-61
LA - ENG
CD - BANRD
AB - CBAC COPYRIGHT: CHEM ABS After detg. the reproducibility and sensitivity of the CHO/HGPRT system using known mutagens and the storage stability of the S-9 fraction, the system was used to det. the mutagenic activity of gases and volatile liqs. Vinyl chloride was cytotoxic and mutagenic in the system when S-9 activation was included. (75-01-4 Vinyl chloride) The activation system had no effect on chlorofluoromethane mutagenic activity. (593-70-4 chlorofluoromethane) Freon 11 and Freon 12 were not mutagenic in the presence or absence of the activation system. (75-69-4 Freon 11)(75-71-8 Freon 12) The results obtained with gases and volatile liqs. using this system were comparable with results obtained using other systems.
RN - 75-01-4; 593-70-4; 75-69-4; 75-71-8; 62-75-9
EM - 8005

93 SI - CA/092/122836X
AU - Dessy E ; Spinazzola A ; Bucarelli A ; Tagarelli G ; Faa G
AD - Univ. Cagliari, Cagliari
TI - First results of studies on the effects of vinyl chloride on rats kept in an industrial atmosphere for controlled time periods
SO - G. Ital. Med. Lav.; VOL 1, ISS 2, 1979,83-6
LA - ITA
CD - GIMLD
AB - CBAC COPYRIGHT: CHEM ABS Rats exposed to vinyl chloride in a human work environment at the same h in which workers are exposed showed morphol. alterations of organs particularly the liver, kidneys, and spleen. (75-01-4 Vinyl chloride) Implications of these findings to workers exposed to vinyl chloride at concns. considered safe are discussed.
RN - 75-01-4
EM - 8005

94 SI - CA/091/103484U
AU - Harrison EA
TI - Toxicity of Vinyl Chloride. (A Bibliography with Abstracts)
SO - 1979,91 pp.
LA - ENG
CD - BOOKA
AB - CBAC COPYRIGHT: CHEM ABS A book Vinyl chloride toxicity book
RN - 75-01-4

EM - 7910

95 SI - CA/091/[illegible]906R
AU - Gideon JA
AD - Cent. Dis. Control, Natl. Inst. Occup. Saf. Health, Cincinnati
TI - Engineering control technology in polyvinyl chloride polymerization plants
SO - J. Environ. Pathol. Toxicol.; VOL 2, ISS 5, 1979,285-318
LA - ENG
CD - JEPTD
AB - CBAC COPYRIGHT: CHEM ABS A discussion is given on control of vinyl chloride pollution of the air of plants where PVC is manufd. (75-01-4 Vinyl chloride)(9002-86-2 PVC)
RN - 75-01-4; 9002-86-2
EM - 7909

96 SI - CA/091/078393D
AU - Kucerova M ; Polivkova Z ; Batora J
AD - Pediatr. Dep., Postgrad. Med. Inst., Prague
TI - Comparative evaluation of the frequency of chromosomal aberrations and the sister-chromatid exchange (SCE) numbers in peripheral lymphocytes of workers occupationally exposed to vinyl chloride monomer
SO - Mutat. Res.; VOL 67, ISS 1, 1979,97-100
LA - ENG
CD - MUREA
AB - CBAC COPYRIGHT: CHEM ABS Comparison of data on 9 workers exposed to vinyl chloride (I) indicates that routine chromosomal aberrations and SCE nos. are equally suitable for testing of high-dose I mutagenicity in vivo. (75-01-4 Vinyl chloride)
RN - 75-01-4
EM - 7909

97 SI - CA/091/069719N
AU - Hultmark D ; Sundh K ; Johansson L ; Arrhenius E
AD - Wallenberg Lab., Stockholm Univ., Stockholm
TI - Ethanol inhibition of vinyl chloride metabolism in isolated rat hepatocytes
SO - Chem.-Biol. Interact.; VOL 25, ISS 1, 1979,1-6
LA - ENG
CD - CBINA
AB - CBAC COPYRIGHT: CHEM ABS Isolated rat liver cells converted 14C-labeled vinyl chloride (I) into nonvolatile metabolites. (75-01-4 Vinyl chloride) This metab. was not increased by in vivo pretreatment with phenobarbital. It was sensitive to inhibition by EtOH, which, at a concn. of 4 mM, inhibited I metab. to 50% in hepatocyte suspensions. (64-17-5 Ethanol) The metabolic activity was NADPH-dependent and was localized in the microsomal fraction of the liver. The enzyme was also strongly inhibited by tetrahydrofuran, indicating that it could be identical to an EtOH-inducible cytochrome P 450 species. (109-99-9 Tetrahydrofuran)(9035-51-2 cytochrome P 450)
RN - 75-01-4; 64-17-5; 109-99-9; 9035-51-2

EM - 7909

98 SI - CA/091/069374W
AU - Frejaville JP ; Beaune P ; Cresteil T
AD - Dep. Anesthesiol., Hop. Necker, Paris
TI - Metabolism of chloroethylenes
SO - Arch. Mal. Prof. Med. Trav. Secur. Soc.; VOL 40, ISS 1-2, 1979,359-64
LA - FRE
CD - AMPMA
AB - CBAC COPYRIGHT: CHEM ABS A review with 4 refs. on the metab. of chlorinated derivs. of ethylene and in particular, of the biotransformation and toxicity of trichloroethylene and vinyl chloride. (79-01-6 Trichloroethylene)(75-01-4 Vinyl chloride)
RN - 79-01-6; 75-01-4; 74-85-1
EM - 7909

99 SI - CA/091/061896X
AU - Zolkin GA
AD - Vses. Nauchno-Issled. Inst. Tr. Stroit., Moscow
TI - Hygienic assessment of the high-temperature treatment of poly(vinyl chloride) finishing materials
SO - Gig. Sanit.; ISS 4, 1979,76-7
LA - RUS
CD - GISAA
AB - CBAC COPYRIGHT: CHEM ABS The atm. surrounding workers employed in welding PVC linoleum averaged above the permissible concns. of CH2:CHCl and di-Bu phthalate. (9002-86-2 PVC)(75-01-4 Vinyl chloride)(84-74-2 Dibutyl phthalate) This was true for both processes studied, IR heating and direct contact with hot electrodes.
RN - 9002-86-2; 75-01-4; 84-74-2
EM - 7908

100 SI - CA/091/032798M
AU - Brundett RB ; Colvin M ; White EH ; McKee J ; Hartman PE
AU - Brown DL
AD - Dep. Chem., Johns Hopkins Univ., Baltimore
TI - Comparison of mutagenicity, antitumor activity, and chemical properties of selected nitrosoureas and nitrosoamides
SO - Cancer Res.; VOL 39, ISS 4, 1979,1328-33
LA - ENG
CD - CNREA
AB - CBAC COPYRIGHT: CHEM ABS Nitroureas and nitrosoamides were compared with respect to mutagenicity for Salmonella typhimurium, in vitro cytotoxicity, in vitro toxicity and antitumor activity against murine leukemia, and chem. properties. Despite chem. similarities between the nitroureas and nitrosoamides, they showed important differences in biol. activity. Some of the nitrosoureas were very active antitumor agents, and less mutagenic than the corresponding nitrosoamides, which lacked antitumor activity.
RN - 67-56-1; 75-01-4; 75-07-0; 79-20-9; 107-06-2; 107-07-3; 154-93-8;

542-58-5; 627-06-5; 684-93-5; 816-57-9; 1118-69-0; 2365-30-2; 5211-42-7; 5331-48-6; 7355-58-0; 7417-67-6; 13010-20-3; 51834-70-9; 64057-51-8; 67809-15-8; 70636-67-8; 70636-68-9; 70636-69-0
EM - 7908

101 SI - CA/090/209572R
AU - Lubyanskii ML ; Levina MM ; Gronsberg ES ; Mikhno VB
AD - Gor'k. Nauchno-Issled. Inst. Gig. Tr. Profzabol. Minist. Zdravookhr., Gorkiy, USSR
TI - Hygienic assessment of the fire detoxication of wastes from dichloroethane and vinyl chloride production
SO - Gig. Sanit.; ISS 3, 1979,61-3
LA - RUS
CD - GISAA
AB - CBAC COPYRIGHT: CHEM ABS The wastes are burned at 1150-1250.degree. and the stack gases scrubbed with HCl soln. and then water. The reclaimed HCl is reused. No CCl4, CHCl3, or COCl2 are present in the final emissions, but 116 kg Cl2 and 98.5 kg HCl are emitted/day. It is recommended that the stack gases be scrubbed with Ca(OH)2 to reduce these amts.
RN - 75-01-4; 1300-21-6; 1305-62-0; 7647-01-0; 7782-50-5
EM - 7907

102 SI - CA/090/209274V
AU - Sudo Y ; Oshima E
AD - Dep. Ind. Chem., Tokyo Natl. Tech. Coll., Hachioji, Japan
TI - Pyrolysis rate of vinyl chloride monomer

121 SI - CA/092/046581T
AU - Harsch DE ; Cronn DR ; Slater WR
AD - Dep. Chem. Eng., Washington State Univ., Pullman
TI - Expanded list of halogenated hydrocarbons measurable in ambient air
SO - J. Air Pollut. Control Assoc.; VOL 29, ISS 9, 1979,975-6
LA - ENG
CD - JPCAA
AB - CBAC COPYRIGHT: CHEM ABS Addnl. halocarbon compds. which can be measured in ambient air samples by the freeze-out concn. method are listed with other hydrocarbons known to be present in the atm. Retention times and detection limits of these hydrocarbons are given. Among these halogenated hydrocarbons were: MeI, cis-C2H2Cl2, 1,2-C2H4Br2, CHBr3, and CBr4. (74-88-4 Methyl iodide)(156-59-2 cis-Dichloroethylene)(106-93-4 1,2-Dibromoethane)(74-95-3 Dibromo methane)(558-13-4 Tetrabromomethane)
RN - 74-88-4; 156-59-2; 106-93-4; 74-95-3; 558-13-4; 56-23-5; 67-66-3; 71-55-6; 74-83-9; 74-87-3; 75-00-3; 75-01-4; 75-09-2; 75-43-4; 75-69-4; 75-71-8; 76-13-1; 76-14-2; 79-01-6; 107-06-2; 127-18-4; 557-91-5; 590-11-4
EM - 8002

122 SI - CA/092/046483N
AU - Infante PF
AD - Cent. Dis. Control, Natl. Inst. Occup. Saf. Health, Cincinnati
TI - Epidemiologic approaches for surveillance of genetic hazards with particular reference to anesthetic gases
SO - Genet. Damage Man Caused Environ. Agents, [Proc. Conf.]; 1979,289-300
LA - ENG
CD - 41RGA
AB - CBAC COPYRIGHT: CHEM ABS A review and discussion with 19 refs. of mutagenic effects of waste anesthetic gases, vinyl chloride, and chloroprene. (75-01-4 Vinyl chloride)(126-99-8 Chloroprene)
RN - 75-01-4; 126-99-8
EM - 8002

123 SI - CA/092/027646B
AU - Sebestyen NA ; Thompson WB
AD - Perkin-Elmer Corp., Norwalk
TI - The determination of vinyl chloride monomer in charcoal-loaded personnel monitor tubes using the automated gas chromatographic head space technique
SO - Chromatogr. Newsl.; VOL 7, ISS 2, 1979,29-30
LA - ENG
CD - CHNLA
AB - CBAC COPYRIGHT: CHEM ABS The head space method described herein is a simple and accurate, totally automated, way to det. vinyl chloride which has been adsorbed in a personnel monitor collection tube contg. activated charcoal. (75-01-4 vinyl chloride) The relatively short anal. cycle time (6 min) and

relative accuracy (.apprx.2%) will allow for a high throughput (over 200 samples day) of accurate results.
RN - 75-01-4
EM - 8002

124 SI - CA/092/028382Z
AU - Watson JR ; Lawrence RC ; Lovering EG
AD - Pharm. Chem. Div., Drug Res. Lab., Ottawa
TI - A gas chromatographic (GC) headspace method for monitoring vinyl chloride in liquid drug and cosmetic products
SO - Can. J. Pharm. Sci.; VOL 14, ISS 3, 1979,57-60
LA - ENG
CD - CNJPA
AB - CBAC COPYRIGHT: CHEM ABS A gas chromatog. method is described for monitoring vinyl chloride levels in liq. drug and cosmetic prepns. packaged in poly(vinyl chloride) containers. (75-01-4 Vinyl chloride)(9002-86-2 Poly(vinyl chloride)) A weighed aliquot of the com. product in a tightly septum-sealed vial with accurately known headspace vol. is heated to 50.degree. for 30 min. A portion of the warm headspace gas is then injected into a gas chromatog. equipped with a flame ionization detector and a styrene-divinylbenzene porous polymer column. The vinyl chloride is eluted isothermally at 125.degree. and is quantitated by simple computation relative to a response factor detd. daily using a std. vinyl chloride-air calibration gas mixt. The procedure was subjected to collaborative study by 5 analysts. Two mouthwash products, 2 com. shampoos, 2 large vol. parenteral solns. and 2 baby oil prepns. were analyzed. Statistical evaluation of the results of the study showed that the method had an overall coeff. of variation of about 17%. The limit of detectability of the procedure is about 0.1 ppb in the sample soln.
RN - 75-01-4; 9002-86-2
EM - 8002

RNW 1644.1

127 SI - CA/092/010481W
AU - Roosken AA M
AD - Dienst Cent. Milieubeheer Rijnmond, Schiedam
TI - Measurement of organic gases in the atmosphere
SO - PT-Procestech.; VOL 34, ISS 7, 1979,409-15
LA - DUT
CD - PTPTB
AB - CBAC COPYRIGHT: CHEM ABS Various measuring methods are discussed. The identification of sep. components offer problems. The best procedure is a combination of mass spectrometry and capillary gas chromatog.
RN - 71-43-2; 74-98-6; 75-01-4; 107-13-1
EM - 8001

128 SI - CA/091/198029M
AU - Lee K ; Jahnes HJ ; Macauley DC
AD - Chem. Plast. Div., Union Carbide Corp., South Charleston
TI - Thermal oxidation kinetics of selected organic compounds
SO - J. Air Pollut. Control Assoc.; VOL 29, ISS 7, 1979,749-51
LA - ENG
CD - JPCAA
AB - CBAC COPYRIGHT: CHEM ABS The incineration of vinyl chloride, Et acrylate, acrolein, and benzene (100, 500, and 1000 ppm in air) at 800-1500.degree.F for 0.1-2 s was studied to det. the fundamental time-temp. relations for different chems. at low oxidn. temps. in the absence of flame-generated free radicals. (75-01-4 Vinyl chloride)(140-88-5 Ethyl acrylate)(107-02-8 Acrolein)(71-43-2 Benzene)
RN - 75-01-4; 140-88-5; 107-02-8; 71-43-2
EM - 8001

129 SI - CA/091/205275U
AU - Feron VJ ; Kruysse A ; Til HP
AD - Cent. Inst. Nutr. Food Res., TNO, Zeist
TI - One-year time sequence inhalation toxicity study of vinyl chloride in rats. I. Growth, mortality, hematology, clinical chemistry and organ weights
SO - Toxicology; VOL 13, ISS 1, 1979,25-8
LA - ENG
CD - TXCYA
AB - CBAC COPYRIGHT: CHEM ABS Wistar rats were exposed to atmospheres contg. 0 (control) or 5000 ppm vinyl chloride monomer (VCM), 7 h/day, 5 days/wk, for a period of 52 wk. (75-01-4 Vinyl chloride) After 4, 13, 26, and 52 wk, 10 rats/sex/group were killed and subjected to extensive examns. as to growth, mortality, hematol., clin. chem., and organ wts. Slight growth retardation throughout the exptl. period and high mortality in the 2nd half of the study were obsd. in VCM-exposed animals. Some of the hematol. parameters and biochem. blood parameters were influenced by VCM after an exptl. period of 52 wk only. Blood clotting time was shorter in VCM-exposed rats than in controls. There were minor indications of increased K contents of the blood serum in VCM-exposed animals during the 1st half of the test period. The kidneys were adversely affected by VCM as indicated by increased blood urea N levels and relative kidney wts. After 52 wk, increased wts. of heart and spleen, and slight signs of anemia were noticed in VCM-exposed rats. The present study did not produce suitable parameters for early diagnosis of VCM-disease in man.
RN - 75-01-4; 7440-09-7
DTG - CHRONIC TOXIC DOSE
EM - 8001

130 SI - CA/091/186713V
AU - Schmidt CC ; Jewett GL ; Melcher RG ; Wessling RA
TI - Prolonging the breakthrough of volatile substances through adsorbent-containing air purifying devices
SO - Can. PATENT NO. 1055405 05/29/79 (Dow Chemical Co.)
LA - ENG
AB - CBAC COPYRIGHT: CHEM ABS Volatile org. vapors are adsorbed on activated C in gas masks and chem. cartridge respirators. The activated C (Saran C) is prepd. from cryst. vinylidene chloride polymer, and has surface area of 900-1400 m2/g. Thus, air contg. vinylidene chloride 35.5 and vinyl chloride 50 ppm was passed through a Saran C column (inside diam. 1/4 in. and 7 cm-thick bed), and complete retention of vinylidene chloride and 4% breakthrough of vinyl chloride was obsd. for 0.5 L/min after 6 h. (75-35-4 Vinylidene chloride)(75-01-4 Vinyl chloride)
RN - 75-35-4; 75-01-4; 74-97-5; 75-25-2; 7440-44-0; 25429-23-6
EM - 7912

131 SI - CA/091/180665F
AU - Fomenko VN ; Zaeva GN ; Katosova LD ; Pavlenko GI
TI - Results of a study of oncological morbidity and cytogenetic effects in workers occupied in processes for polymerizing vinyl chloride
SO - Toksikol. Nov. Prom. Khim. Veshchestv, (Moskva); ISS 15, 1979,17-21
LA - RUS
CD - D4JOU
AB - CBAC COPYRIGHT: CHEM ABS Title only translated. Vinyl chloride occupational exposure cancer Cytogenetics vinyl chloride occupational exposure
RN - 75-01-4; 9002-86-2
EM - 7912

132 SI - CA/091/180628W
AU - Montalvo JG Jr
AD - Gulf South Res. Inst., New Orleans
TI - Error estimates in total organic elemental content passive personal samplers
SO - NBS Spec. Publ. (U. S.); VOL 519, ISS Trace Org. Anal.: New Front. Anal. Chem., 1979,747-52
LA - ENG
CD - XNBSA
AB - CBAC COPYRIGHT: CHEM ABS Equations were derived and a protocol suggested for computing the ambient concn.-error attributed to the mol. diffusion approxn. for total elemental content passive-personal samplers. An example was described for a total org. Cl passive-sampler at a vinyl chloride plant in relation to carcinogenesis correlation. The samples need not be restricted to total org. Cl, but could include total org. Br, total arom. amines, etc.
RN - 75-01-4; 7440-44-0
EM - 7912

133 SI - CA/091/180599N
AU - Diehl W ; Gellendin D ; Grambow L ; Huneke KH ; Zwintzscher H
TI - Toxiwarn - a portable measuring and warning apparatus for toxic gases
SO - Draegerheft; VOL 313,, 1979,2-16
LA - GER
CD - DRAEA
AB - CBAC COPYRIGHT: CHEM ABS The construction and operation of Toxiwarn, as app. employing the Toxicator cassette (giving a color reaction on flexible tape) to indicate the presence of toxic concns. of gases (C2H3Cl, Cl, HCN, H2S, COCl2) are described. (75-01-4 Vinyl chloride)(75-44-5 Phosgene)
RN - 75-01-4; 75-44-5; 74-90-8; 7782-50-5; 7783-06-4
EM - 7912

134 SI - CA/091/152364P
AU - Sharma RP ; Gehring PJ
AD - Toxicol. Program, Utah State Univ., Logan
TI - Immunologic effects of vinyl chloride in mice
SO - Ann. N. Y. Acad. Sci.; VOL 320,, 1979,551-63
LA - ENG
CD - ANYAA
AB - CBAC COPYRIGHT: CHEM ABS Mice were exposed to 10-1000 ppm vinyl chloride (VC) for 2-8 wk 6 h/day, 5 days/wk. (75-01-4 Vinyl chloride) A slight increase in the spleen wt. of mice was noted at the highest exposure level. Spleens were obtained from these animals (4 mice/group after 2, 4, and 8 wk of exposure) and their lymphocytes cultured in vitro with or without the presence of phytomitogens, phytohemagglutinin (PHA) and pokeweed mitogen (PWM). Relative blast formation and the DNA synthesis was measured by the incorporation of 3H-labeled thymidine in the cultured cells. The response of splenic lymphocytes to the phytomitogens was increased several-fold by VC exposure. The effects were apparent at 1000 ppm VC after 2 wk of exposure and at all levels of VC exposure after 4-8 wk. The effects were generally more pronounced at 100 ppm VC exposure than those at 1000 ppm. In vitro culture of splenic lymphocytes from control or VC-exposed mice in the VC atm. did not show an enhancement of blast formation. Alteration of VC metab. during the VC exposure in vivo yielded results that indicated that metabolites of VC may be responsible for the stimulation of lymphocyte transformation obsd. in splenic cultures.
RN - 75-01-4
EM - 7912

135 SI - CA/091/151529J
AU - Weinkam RJ ; Lin H
AD - Sch. Pharm., Univ. California, San Francisco
TI - Reactions of 1,3-bis(2-chloroethyl)-1-nitrosourea and 1-(2-chloroethyl)-3-cyclohexyl-1-nitrosourea in aqueous solution
SO - J. Med. Chem.; VOL 22, ISS 10, 1979,1193-8
LA - ENG
CD - JMCMA
AB - CBAC COPYRIGHT: CHEM ABS The products formed during decompn. of the title compds., BCNU and CCNU, in neutral aq. soln. accounted for 75-80% of the starting material. (154-93-8 BCNU)(13010-47-4 CCNU) Most of the products were formed from an an initial cleavage of the nitrosourea, whereas some were formed from denitrosation of the nitrosourea. The relation of these products to the active form of the alkylating agents is discussed.
RN - 154-93-8; 13010-47-4; 75-01-4; 75-07-0; 107-07-3; 108-91-8; 497-25-6; 689-98-5; 2214-72-4; 2387-23-7; 10002-37-6; 13908-11-7; 15438-70-7; 71353-16-7; 71353-17-8; 71479-93-1
EM - 7912

136 SI - CA/093/216422G
AU - Buchter A ; Bolt HM ; Filser J ; Goergens HW ; Laib RJ ; Bolt W
AD - Inst. Poliklin. Arbeits- Sozialmed., Univ. Koeln, Cologne
TI - Pharmacokinetics and carcinogenesis of vinyl chloride. Laboratory medicine risk evaluation
SO - Moeglichkeiten Grenzen Biol. Monit./Arbeitsmed. Probl. Dienstleitungsgewerbes/Arbeitsmed. Kolloq., B; 1978,111-24
LA - GER
CD - 44JJA
AB - CBAC COPYRIGHT: CHEM ABS Half-life time of inhaled vinyl chloride in rats, rabbits, mice, Meriones unguiculatus, and 2 persons weighing 63 and 83 kg were 67.8, 277, 44, 143, 18, and 20.5 min, resp. (75-01-4 Vinyl chloride) The clearance rate was 8.4, 2.74, 25.6, 12.48, 1.74, and 2.43 L/h/kg. Within 1 min of vinyl chloride inhalation, the vinyl chloride concn. in the breath of the test persons reached 70-4% of the final concn., indicating an extremely rapid intake and spread in the body. The metabolic elimination of vinyl chloride involves formation of a carcinogenic epoxide.
RN - 75-01-4
EM - 8101

137 SI - CA/093/100759T
AU - Goryacheva LA ; Stulova EA
TI - Comparative data of a study of nervous activity mediators in patients with chronic vinyl chloride and tetraethyllead poisoning
SO - Aktual'n. Vopr. Gigieny i Profpatol. v Nekotor. Otrasl. Khim. Prom-sti, M.; 1978,63-5
LA - RUS
CD - D3RAP
AB - CBAC COPYRIGHT: CHEM ABS Title only translated. Nervous system chloroethane tetraethyllead poisoning Vinyl chloride poisoning

nervous system Tetraethyllead chronic poisoning nervous system Occupational poisoning chronic chloroethene tetraethyllead
RN - 75-01-4; 78-00-2
EM - 8009

138 SI - CA/093/078743J
AU - Guerra ON ; Kronoveter KJ
AD - Ellis Fischel State Cancer Hosp., Columbia
TI - Vinyl chloride concentrations in maxillofacial prosthetics laboratories
SO - J. Prosthet. Dent.; VOL 39, ISS 2, 1978,200-2
LA - ENG
CD - JPDEA
AB - CBAC COPYRIGHT: CHEM ABS Time-weighted av. exposures of technicians in 3 maxillofacial prosthetics labs were <0.1 ppm vinyl chloride; the US std. exposure limit is 1 ppm averaged over an 8-h period. (75-01-4 Vinyl chloride)
RN - 75-01-4
EM - 8009

139 SI - CA/092/202650X
AU - Scheil GW ; Sharp MC
AD - Midwest Res. Inst., Kansas City
TI - Collaborative testing of EPA method 106 (vinyl chloride) that will provide for a standardized stationary source emission measurement method
SO - Report; ISS EPA/600/4-78/058; Order No. PB-298775,, 1978,70 pp.
LA - ENG
CD - D8REP
AB - CBAC COPYRIGHT: CHEM ABS Round-robin anal. of std. vinyl chloride (I) samples, with and without potentially interfering compds., showed that Chromosorb 102/SF-96 columns performed better when AcH was present, but Chromosorb 102 alone was better when Me3CH was present. (75-01-4 Vinyl chloride) Operator bias averaged 0.18 ppm low, and std. deviation was 0.72 ppm. Peak height and area measurements gave similar results, the bias resulted entirely from Chromosorb 102 and not from Chromosorb 102/SF-96 columns.
RN - 75-01-4
EM - 8007

140 SI - CA/092/192401A
AU - Doniger DD
TI - The Law and Policy of Toxic Substances Control: A Case Study of Vinyl Chloride
SO - 1978,180 pp.
LA - ENG
CD - BOOKA
AB - CBAC COPYRIGHT: CHEM ABS A book Book vinyl chloride control
RN - 75-01-4
EM - 8007

141 SI - CA/092/134392N
AU - Herget WF ; Brasher JD
AD - Environ. Res. Cent., EPA, Research Triangle Park
TI - Remote measurement of atmospheric pollutants by infrared absorption and emission spectroscopy
SO - Top. Meet. Atmos. Spectrosc., Dig Tech. Pap.; 1978,ThA5/1-ThA5/4
LA - ENG
CD - 42HDA
AB - CBAC COPYRIGHT: CHEM ABS The Remote Optical Sensing of Emissions (ROSE) system was installed in a van for use with a remote light source for absorption measurements of gaseous pollutants over path lengths of .apprx.1 km near a pollutant source or for use in a single-ended mode to obtain emission spectra of gases exiting industrial stacks at elevated temps. The system was used to det., e.g., propylene and C2H4 near an oil refinery and to det. the efficiency of a flare in combusting vinyl chloride. (115-07-1 Propylene)(74-85-1 Ethylene)(75-01-4 Vinyl chloride)
RN - 115-07-1; 74-85-1; 75-01-4
EM - 8005

142 SI - CA/092/115622W
AU - Lee K ; Jahnes HJ ; Macauley DC
AD - Union Carbide Corp., South Charleston
TI - Thermal oxidation kinetics of selected organic compounds
SO - Proc., Annu. Meet. - Air Pollut. Control Assoc.; VOL 71st. Vol. 4,, 1978,Paper No. 58.6, 16 pp.
LA - ENG
CD - PRAPA
AB - CBAC COPYRIGHT: CHEM ABS A plug-flow system was developed to obtain medium-temp. thermal destruction rate data for dil. fumes without flame generated free radicals. Empirical 1st order kinetic equations were obtained for the destruction rate data for vinyl chloride (I), Et acrylate, acrolein, and C6H6. (75-01-4 Vinyl chloride)(140-88-5 Ethyl acrylate)(107-02-8 Acrolein)(71-43-2 Benzene) The destruction rate for C6H6 and I were highly temp.-sensitive, as indicated by their high activation energies (99.6 and 63.3 kcal/g-mole, resp.). A thermal oxidizer designed to operate at 0.5 s residence time would require for 99.9% destruction, a temp. of 1400.degree. F for vinyl chloride, 1380.degree. F for C6H6, 1160.degree. F for Et acrylate, and 1090.degree. F for acrolein.
RN - 75-01-4; 140-88-5; 107-02-8; 71-43-2
EM - 8004

143 SI - CA/092/081459F
AU - Milby TH
AD - SRI Int., Menlo Park
TI - Vinyl chloride - an information resource
SO - Report; ISS NIH-78/1599, DHEW/PUB/NIH-78/1599; Order No. HRP-0028012,, 1978,122 pp.
LA - ENG
CD - D8REP
AB - CBAC COPYRIGHT: CHEM ABS A discussion of the link between exposure to vinyl chloride (I) and the occurrence of toxic, nonmalignant illnesses involving skin, bones, liver, lungs, and blood is provided. (75-01-4 Vinyl chloride) The regulatory history of I is outlined. The potential for human contact with I is great. About 2.5 billion kg of I are produced each year in the United States. I is produced at 15 plants employing 900 workers. I is also polymd. at 39 plants, employing more than 5,500 workers. The Environmental Protection Agency has estd. that approx. 5 million people live near enough to I facilities to be within range of detectable airborne concns. of the gas. The prodn., uses, and dispersion of I are discussed, evidence of its toxic and carcinogenic effects are summarized, and strategies for its control are suggested. The appendices contain a list of I-related compds., an approach to evaluation and control of I exposure, and sources for addnl. information.
RN - 75-01-4
EM - 8003

144 SI - CA/091/205212W
AU - Schaffner F
AD - Mt. Sinai Sch. Med., New York
TI - Effect of long-term vinyl chloride exposure in mouse liver structure
SO - Falk Symp.; VOL 25, ISS Primary Liver Tumors, 1978,189-99
LA - ENG
CD - FASYD
AB - CBAC COPYRIGHT: CHEM ABS Electron microscopic studies of livers of mice exposed to vinyl chloride monomer for .ltoreq.6 mo revealed changes mainly in and around sinusoids and in sinusoidal lining cells, particularly with only mild alterations of hepatocytes. (75-01-4 Vinyl chloride) The angiosarcomas which developed in some mice arose from the sinusoidal lining cells. Screening for early stages of vinyl chloride-induced hepatic injury must be directed to changes in the microcirculation rather than to changes in hepatocellular function.
RN - 75-01-4
DTG - CHRONIC TOXIC DOSE
EM - 8001

145 SI - CA/091/180672F
AU - Signorini G ; Saia B ; Simonato L ; Saladino G
AD - Ist. Med. Lavoro, Univ. Padova, Padua
TI - Clinical data on vinyl chloride-induced angiopathy
SO - Riv. Med. Lav. Ig. Ind.; VOL 2, ISS July-Sept., 1978,261-70
LA - ITA
CD - RMLID
AB - CBAC COPYRIGHT: CHEM ABS Of 1223 workmen exposed to vinyl chloride and examd. by photoplethysmorgraphy, 145 (av age 41.+-.7.5 yr, av. exposure 107.+-.68 mo) showed changes in their tracings. (75-01-4 Vinyl chloride) They were sepd. into 3 groups by the severity of the changes. Reaction to the cold-test confirmed the photoplethysmog. method for mass detection of the peripheral vascular changes in workers.
RN - 75-01-4
EM - 7912

146 SI - CA/091/152569J
AU - Egan H ; Editor
TI - IARC [International Agency for Research on Cancer] Scientific Publications, No. 22: Environmental Carcinogens. Selected Methods of Analysis, Vol. 2: Methods for the Measurement of Vinyl Chloride in Poly(Vinyl Chloride), Air, Water, and Foodstuffs
SO - 1978,142 pp.
LA - ENG
CD - BOOKA
AB - CBAC COPYRIGHT: CHEM ABS A book. Book vinyl chloride detn Air vinyl chloride detn book Water vinyl chloride detn book Food vinyl chloride detn book
RN - 75-01-4; 7732-18-5; 9002-86-2
EM - 7912

147 SI - CA/091/128058W
AU - Anon
TI - Reagent hazards
SO - A&R; VOL 16, ISS 10, 1978,458-63
LA - JPN
CD - ARRRD
AB - CBAC COPYRIGHT: CHEM ABS A review with 3 refs. Review reagent health hazard Safety reagent review
RN - 50-00-0; 55-63-0; 56-23-5; 56-38-2; 56-81-5; 60-29-7; 62-53-3; 64-17-5; 64-18-6; 64-19-7; 64-69-7; 67-56-1; 67-63-0; 67-64-1; 67-66-3; 71-36-3; 71-43-2; 71-55-6; 74-83-9; 74-87-3; 74-90-8; 74-96-4; 75-00-3; 75-01-4; 75-04-7; 75-07-0; 75-09-2; 75-15-0; 75-19-4; 75-21-8; 75-34-3; 75-44-5; 75-52-5; 75-69-4; 75-71-8; 76-03-9; 77-78-1; 78-59-1; 78-88-6; 78-93-3; 79-01-6; 79-04-9; 79-11-8; 79-20-9; 79-24-3; 79-46-9; 87-86-5; 88-89-1; 94-36-0; 95-50-1; 98-59-9; 98-95-3; 99-61-6; 100-41-4; 100-42-5; 106-93-4; 106-99-0; 107-02-8; 107-06-2; 107-07-3; 107-13-1; 107-31-3; 107-87-9; 108-10-1; 108-85-0; 108-87-2; 108-88-3; 108-90-7; 108-93-0; 108-94-1; 108-95-2; 109-60-4; 109-66-0; 109-86-4; 109-87-5; 109-89-7; 109-94-4; 110-49-6; 110-54-3; 110-80-5;

110-82-7; 110-83-8; 111-15-9; 111-65-9; 111-76-2; 121-69-7; 123-51-3; 123-86-4; 123-91-1; 124-38-9; 126-99-8; 127-09-3; 127-18-4; 131-91-9; 141-78-6; 141-79-7; 142-82-5; 144-62-7; 497-19-8; 506-68-3; 62140-13-0
EM - 7910

148 SI - CA/091/118086Q
AU - Kappus H ; Koester U ; Koester-Albrecht D ; Kieczka H ; Remmer H
AD - Med. Inst. Lufthyg. Silikoseforsch., Univ. Duesseldorf, Duesseldorf
TI - Lipid peroxidation induced by ethanol and halogenated hydrocarbons in vivo as measured by ethane exhalation
SO - Funct. Glutathione Liver Kidney, [Pap. Konf. Ges. Biol. Chem.], 25th; 1978,176-82
LA - ENG
CD - 40SNA
AB - CBAC COPYRIGHT: CHEM ABS Exposure of rats to CCl4, EtOH, trichloroethylene, vinyl chloride, CBrCl3, and halothane induced lipid peroxidn. (56-23-5 Carbon tetrachloride)(64-17-5 Ethanol)(79-01-6 Trichloroethylene)(75-01-4 Vinyl chloride)(75-63-8 Bromotrifluoromethane)(151-67-7 Halothane) The expiration of ethane due to CCl4 and CBrCl3 exposure were dose-dependent. The higher the O concn. in atm., the lower the concns. of ethane produced. The results are discussed in ration to the hepatotoxicity of halogenated hydrocarbons and of EtOH.
RN - 56-23-5; 64-17-5; 79-01-6; 75-01-4; 75-63-8; 151-67-7
EM - 7910

149 SI - CA/091/118013P
AU - Warren HS ; Huff JE ; Gerstner HB
AD - Toxicol. Inf. Response Cent., Oak Ridge
TI - Vinyl chloride: a review, 1835-1975; an annotated literature collection, 1976-1975; a literature compilation, 1976-1977
SO - Report; ISS ORNL/TIRC-78/3,, 1978,218 pp.
LA - ENG
CD - D3REP
AB - CBAC COPYRIGHT: CHEM ABS A report on vinyl chloride consisting of 3 parts: part I is a review of vinyl chloride and its health-related aspects as summarized from the literature through 1975; part II comprises an annotated, keyworded, indexed collection of 555 refs. (1835-1975) which emphasizes biol. effects and includes refs. concerning anal. and control in both the workplace and environment; part III is an updated collection of refs. which extends the bibliog. through Sept. 1977. (75-01-4 Vinyl chloride) This bibliog. was compiled from the major scientific abstr. literature. Current journals in appropriate disciplines were also scanned. Refs. are arranged alphabetically by first author's name. A permuted title index is appended for easy access to the bibliog.
RN - 75-01-4
EM - 7910

150 SI - CA/091/043873H
AU - Drugov YS ; Murav'eva GV ; Letunovskaya GA
TI - Determination of vinyl chloride in the air of industrial buildings
SO - Pr-vo Shin, Rezinotekhn. i Asbestotekhn. Izdelii. Nauch.-tekhn. Ref. Sb.; ISS 9, 1978,25-7
LA - RUS
CD - D4JOU
AB - CBAC COPYRIGHT: CHEM ABS Title only translated. Vinyl chloride detn air
RN - 75-01-4
EM - 7908

151 SI - CA/091/043743R
AU - Hobbs JS
AD - Appl. Chem. Syst. Ltd., Luton/Bedfordshire
TI - Determination of vinyl chloride and other chlorinated hydrocarbons in air
SO - Int. Environ. Saf.; ISS March-April, 1978,22
LA - ENG
CD - IESAD
AB - CBAC COPYRIGHT: CHEM ABS Air pollutants were detd. directly by flame ionization detector and microwave plasma detector and the methods could det. sub-ppm. levels by compd. concn. by gas chromatog. using Carbowax 1500 on Carbopack A. For example, vinyl chloride, ethyl chloride, and tetrachloroethylene were detd. at .ltoreq.2, .ltoreq.1, and .apprx.1 ppm, resp. (75-01-4 Vinyl chloride)(75-00-3 Ethyl chloride)(127-18-4 Tetrachloroethylene)
RN - 75-01-4; 75-00-3; 127-18-4
EM - 7908

152 SI - CA/091/043726N
AU - Hernberg S
AD - Tyoterveyslaitos, Helsinki
TI - Epidemiological aspects on occupational cancer
SO - Duodecim; VOL 94, ISS 14-15, 1978,897-904
LA - FIN
CD - DUODA
AB - CBAC COPYRIGHT: CHEM ABS A review, with 39 refs., discussing the occurrence of carcinogens in working environments and epidemiol. data relating to As, Ni, Cr, Cd, asbestos, benzene, polycyclic arom. hydrocarbons, arom. amines, vinyl chloride, mineral oil aerosols, sawdust, and ionizing radiation. (71-43-2 Benzene)(75-01-4 Vinyl chloride)
RN - 71-43-2; 75-01-4; 7440-02-0; 7440-38-2; 7440-43-9; 7440-47-3
EM - 7908

153 SI - CA/091/026626N
AU - Ishikawa T ; Ose Y ; Sato T ; Tomita B
AD - Gifu Coll. Pharm., Gifu
TI - Waste water treatment of night soil. IX. Formation of organohalides in the chlorination process of night soil treatment plant
SO - Eisei Kagaku; VOL 24, ISS 5, 1978,235-40
LA - JPN
CD - ESKGA
AB - CBAC COPYRIGHT: CHEM ABS The effluent of a night soil treatment plant was chlorinated with 500 ppm Ca(ClO)2 at pH 8.0 and the main product of the chlorination was CHCl3. (67-66-3 Chloroform) The quantity of CHCl3 formed was influenced by the amt. of Ca(ClO)2 and by the reaction time. Humic, fulvic, and hymatomelanic acids and MeOH-water-sol. substance were fractionated from the effluent of the night soil treatment plant by the use of Amberlite XAD-2. Each of these 4 fractions was chlorinated at pH 7.0 and all fractions produced chiefly CHCl3. In addn., C2H3Cl3 and C5H9Cl were formed by chlorination of humic acid, and CH2Cl2, CCl4, C2H4Cl2, C2H3Cl3, C3H2Cl2, and PhCl were formed by chlorination of water-MeOH sol. substance. (75-01-4 Chloroethene)(75-09-2 Dichloromethane)(56-23-5 Carbon tetrachloride)(1300-21-6 Dichloroethane)(25323-89-1 Trichloroethane)(108-90-7 Chlorobenzene)
RN - 67-66-3; 75-01-4; 75-09-2; 56-23-5; 1300-21-6; 25323-89-1; 108-90-7; 7778-54-3
EM - 7908

154 SI - CA/091/026462F
AU - Maleev A ; Konstantinova N ; Stanoev M ; Danev S ; Deredzhyan S
AU - Vasileva Z ; Shipkov T
AD - Inst. Intern. Dis. Ther., Sofia
TI - Study of liver damage in poly(vinyl chloride) production workers
SO - Probl. Vutr. Med.; VOL 6, ISS 2-3, 1978,92-7
LA - BUL
CD - PBVMA
AB - CBAC COPYRIGHT: CHEM ABS Examn. of 72 workers from a PVC prodn. plant showed no clear relationship between liver damage and work seniority at the plant (even in the case of workers with a seniority >10 yr); although increased bromosulfophthalein retention (up to 3.2%), reduced thrombocyte counts (220,000) and enlargement of the liver were found in several workers, no actual pathol. occurrences were found, and the anomalies could also be related to excessive consumption of alc. drinks. (9002-86-2 PVC)
RN - 9002-86-2; 75-01-4
EM - 7908

155 SI - CA/091/026434Y
AU - Manns H
AD - Landesanst. Immissionsschutz Landes Nordrhein-Westfalen, Essen
TI - An emission measurement for determination of vinyl chloride
SO - Org. Verunreinig. Umwelt: Erkennen, Bewerten, Vermindern, [Tag.]; 1978,511-13
LA - GER
CD - 40KFA
AB - CBAC COPYRIGHT: CHEM ABS Methods for detg. vinyl chloride in air, particularly adsorption on Mol. sieve 5A, desorption on He, and gas chromatog., are discussed. (75-01-4 vinyl chloride)
RN - 75-01-4
EM - 7908

156 SI - CA/091/014626Z
AU - Ross RH ; Yeatts LB Jr ; Lewis EB ; Dailey GA ; Harnden DS
AU - Michelson DC ; Frogge LM
AD - Oak Ridge Natl. Lab., Oak Ridge
TI - Environmental and health aspects of selected organohalide compounds: an information overview
SO - Report; ISS ORNL/EIS-105,, 1978,512 pp.
LA - ENG
CD - D3REP
AB - CBAC COPYRIGHT: CHEM ABS A review with 915 refs. on the environmental and health effects of difluorodichloromethane, trichlorofluoromethane, CHCl3, Me chloroform, CCl4, perchloroethylene, hexachlorobutadiene, vinyl chloride, allyl chloride and ethylene dibromide. (75-71-8 Difluorodichloromethane)(75-69-4 Trichlorofluoromethane)(67-66-3 Chloroform)(71-55-6 Methyl chloroform)(56-23-5 Carbon tetrachloride)(127-18-4 Perchloroethylene)(87-68-3 Hexachlorobutadiene)(75-01-4 Vinyl chloride)(107-05-1 Allyl chloride)(106-93-4 Ethylene dibromide)
RN - 75-71-8; 75-69-4; 67-66-3; 71-55-6; 56-23-5; 127-18-4; 87-68-3; 75-01-4; 107-05-1; 106-93-4
EM - 7908

157 SI - CA/091/009017X
AU - Lamorte MF
TI - National Emission Standards for Hazardous Air Pollutants. Inspection Manual for Vinyl Chloride
SO - 1978,123 pp.
LA - ENG
CD - BOOKA
AB - CBAC COPYRIGHT: CHEM ABS A book. Book vinyl chloride emission std
RN - 75-01-4
EM - 7907

158 SI - CA/090/209315J
AU - Carcassoni B ; Basei R ; Zilio-Grandi F
AD - Stabilimento Petrolchim., Montedison S.p.A., Porto Marghera, Italy
TI - Automatic gas chromatograph in the environmental control of the petrochemical industry
SO - Inquinamento; VOL 20, ISS 12, 1978,55-62
LA - ITA
CD - IQAAA
AB - CBAC COPYRIGHT: CHEM ABS The adaptation of std. gas chromatographs to continuous monitoring of air in or around a petrochemicals plant is described. Sep. detectors are used for SO2, H2S, total S, NO + NO2, total hydrocarbons, dust, and total org. compds. Visual and audible alarms are sounded when preset values for e.g., vinyl chloride monomer, are exceeded and the results are recorded centrally. (75-01-4 Vinyl chloride)
RN - 75-01-4; 7440-44-0; 7446-09-5; 7704-34-9; 7783-06-4; 11104-93-1
EM - 7907

159 SI - CA/090/209267V
AU - Krajewski J ; Dobecki M
AD - Inst. Med. Pr., Lodz, Pol.
TI - Determination of vinyl chloride in the air by gas chromatography
SO - Med. Pr.; VOL 29, ISS 5, 1978,403-10
LA - POL
CD - MEPAA
AB - CBAC COPYRIGHT: CHEM ABS CH2:CHCl (I) is estd. in air by gas chromatog. on columns contg. Chromosorb WAW, (Me)2SiCl2, and 10% of silicone SE-30, with the aid of a flame ionization detector. (75-01-4 Vinyl chloride) Prior sorption of I on charcoal makes it possible to det. I concns. down to 1 mg/m3 air.
RN - 75-01-4
EM - 7907

160 SI - CA/090/192038W
AU - Bailin LJ
AD - Palo Alto Res. Lab., Lockheed Missiles and Space Co., Inc., Palo Alto, Calif.
TI - Microwave plasma detoxification process for hazardous wastes. Phase II. Systems application evaluation
SO - Report; ISS EPA/600/2-78/080; Order No. PB-284652,, 1978,33 pp.
LA - ENG
CD - D8REP
AB - CBAC COPYRIGHT: CHEM ABS This preliminary report has revealed new information on several highly toxic substances which exist within the continental US for which there is no satisfactory means of disposal. They exist in multiple ton quantities, as well as small cg batches at a multitude of locations. They are, specifically, materials in search of a disposal method, such as the microwave plasma detoxification process (MWP). These materials which have been surveyed for suitability in the MWP include the following exceedingly dangerous compds. and mixts.: cancer-causing nitrosamines, vinyl chloride and vinylidene

chloride, dioxin-contg. organohalogens, and arom. amine compds. which heretofore have been considered only as oddities or as being present only in small quantities; acute-toxicity organometallic compds. and heavy metal complexes such as Hg, As, Ce, and Pb compds., derived from industrial processes and pesticides; nervepoisons from military sources, which include organophosphorus chemicals stock-piled above ground; and pesticide wastes which are only slightly less hazardous. (75-01-4 Vinyl chloride)(75-35-4 vinylidene chloride)(828-00-2 Dioxin)
RN - 75-01-4; 75-35-4; 828-00-2; 7439-92-1; 7439-97-6; 7440-38-2; 7440-43-9; 7723-14-0
EM - 7906

161 SI - CA/090/191749S
AU - Sudo Y ; Yagasaki A ; Yamazaki H ; Hagiwara T ; Ohshima E
AD - Tokyo Natl. Tech. Coll., Tokyo, Japan
TI - The rate of catalytic reaction of vinyl chloride monomer
SO - Tokyo Kogyo Koto Semmon Gakko Kenkyu Hokokusho; VOL 10,, 1978,71-4
LA - JPN
CD - TKSHD
AB - CBAC COPYRIGHT: CHEM ABS Vinyl chloride in air was adsorbed on activated C, and the spent C was regenerated by heating. (75-01-4 Vinyl chloride) The heating requires a large amt. of energy, and suitable catalysts were investigated. The catalysts were CuO-CuCr2O4, Ni, SiO2-Al2O3, Pt-Al2O3, and Pd-Al2O3. The CuO-CuCr2O4 (Cu catalyst) was the best. Pt and Pd catalysts deteriorated rapidly because of HCl, a decompn. product of vinyl chloride. The reaction temp. and contact time were 275-368.degree. and 0.2-1.4 s, resp.
RN - 75-01-4; 1344-28-1; 7440-02-0; 7440-05-3; 7440-06-4; 7440-47-3; 7440-50-8; 7631-86-9
EM - 7906

162 SI - CA/090/173936W
AU - Frohreich RA ; Scamehorn JF
AD - USA
TI - Incomplete drying of activated carbon in a process for vinyl chloride monomer reduction in vapors
SO - U.S. PATENT NO. 4128405 12/05/78 (Continental Oil Co.)
AB - CBAC COPYRIGHT: CHEM ABS Adsorption of vinyl chloride (I) from PVC reactor effluent vapors on incompletely dried activated C, under essentially adiabatic conditions with the heat of adsorption of I desorbing water instead of heating the C bed, results in adsorbing greater amts. of I/lb C, less drying needed after regeneration, and less likelihood of undesirable high temp. reactions occurring. (75-01-4 Vinyl chloride)(9002-86-2 PVC)
RN - 75-01-4; 9002-86-2; 7440-44-0
EM - 7906

163 SI - CA/090/180981K
AU - Szulinski S
AD - Zakl. Hig. Komunalnej, Panstw. Zakl. Hig., Warsaw, Pol.
TI - Use of a rapid method for evaluating the function of the central nervous system in small laboratory animals in hygienic-toxicological studies
SO - Rocz. Panstw. Zakl. Hig.; VOL 29, ISS 6, 1978,677-81
LA - POL
CD - RPZHA
AB - CBAC COPYRIGHT: CHEM ABS An exptl. set-up is described for toxicol. simultaneous testing of several groups of lab. animals in stimuli discrimination and learning. The technique enables several-day testing without requiring the presence of an experimenter by using electronic devices. The method was applied to the detn. of the effects of Kosulfonate 40, lindane, trichlorfon, and vinyl chloride on the function of the central nervous system in rats. (69989-50-0 Kosulfonate 40)(58-89-9 Lindane)(52-68-6 trichlorfon)(75-01-4 Vinyl chloride)
RN - 69989-50-0; 58-89-9; 52-68-6; 75-01-4
EM - 7906

164 SI - CA/090/156388B
AU - Szybinski Z ; Popiela T
AD - Akad. Med., Krakow, Pol.
TI - Early detection of effects of chronic intoxication with vinyl chloride and mercury vapors
SO - Med. Pr.; VOL 29, ISS 5, 1978,371-7
LA - POL
CD - MEPAA
AB - CBAC COPYRIGHT: CHEM ABS Medical examns. and lab. tests are proposed for detecting early effects of chronic intoxications with vinyl chloride (I) and Hg vapors. (75-01-4 Vinyl chloride) Results of the examns. of 168 and 236 persons occupationally exposed to I and Hg, resp., are presented.
RN - 75-01-4; 7439-97-6
EM - 7905

165 SI - CA/090/156304W
AU - Johansson J ; Marthinsson BG ; Eng ST
AD - Dep. Electr. Meas., Chalmers Univ. Technol., Goetebrog, Swed.
TI - Computer automation and error analysis of a carbon dioxide-laser long-path absorption system for air pollution monitoring
SO - IEEE Trans. Instrum. Meas.; VOL IM-27, ISS 4, 1978,358-63
LA - ENG
CD - IEIMA
AB - CBAC COPYRIGHT: CHEM ABS A CO2-laser long-path absorption system is computer automated; lasers and electronic circuits are computer controlled. Estn. of systematic error and imprecision is used to select an optimum measurement strategy for each different pollution situation. In an area of a petrochem. plant, using path lengths of 500-2800 m, C2H4 30-400 and vinyl chloride <50 ppb were detected. (74-85-1 Ethylene)(75-01-4 Vinyl

chloride) The systematic errors are 5-10 and the imprecision is 5-25%.
RN - 74-85-1; 75-01-4
EM - 7905

166 SI - CA/089/151877E
AU - Murakami H ; Okamoto T
AD - Japan
TI - Continuous purification of a waste gas containing gaseous impurities
SO - Ger. Offen. PATENT NO. 2651906 05/18/78 (Taiyo Kaken K. K.)
AB - CBAC COPYRIGHT: CHEM ABS Waste gases are scrubbed in a continuous process using a tower operating on the fluidized-bed principle and contg. perforated plates and circulating, spherical activated C for stabilization of the fluidized bed and of the transport of the activated C particles. The plates are arranged in a vertical cascade manner so that 80-95% of the total plate surface is in 1 zone and 5-20% of the surface in another zone. Thus, vinyl chloride (I) was removed from a waste gas contg. 4947 ppm I in a tower contg. 6 plates with circulating (120 kg/h) activated C spheres of 0.8 mm av. diam. (75-01-4 Vinyl chloride) The exit gas contained 5 ppm I.
RN - 75-01-4; 7440-44-0
EM - 7811

167 SI - CA/089/151752K
AU - Chiorboli C ; Bignozzi CA ; Maldotti A ; Carassiti V
AD - Ist. Chim., Univ. Ferrara, Ferrara, Italy
TI - Synergistic effects in the photooxidation of ethylene and vinyl chloride induced by 1-3 butadiene
SO - J. Photochem.; VOL 9, ISS 2-3, 1978,113-15
LA - ENG
CD - JPCMA
AB - CBAC COPYRIGHT: CHEM ABS An increase in 1,3-butadiene (I) concn. in C2H4-I-NO2 and vinyl chloride (II)-I-NO2 systems accelerated first and then slowed down C2H4 and II photooxidn. processes because of the occurrence of pos. and neg. synergistic effects depending on the relative concns. of the hydrocarbons. (106-99-0 1,3-Butadiene)(74-85-1 Ethylene)(75-01-4 Vinyl chloride)
RN - 106-99-0; 74-85-1; 75-01-4; 10102-44-0
EM - 7811

168 SI - CA/089/124343W
AU - Crockett PW
AD - USA
TI - Toxicity of Vinyl Chloride. (A Bibliography with Abstracts)
SO - 1978,86 pp.
CD - BOOKA
AB - CBAC COPYRIGHT: CHEM ABS A book Book vinyl chloride toxicity
RN - 75-01-4
EM - 7810

169 SI - CA/089/117127A
AU - Skoglund FO ; Landner L
AD - Inst. Vatten- Luftvardsforsk., Stockholm, Swed.
TI - Chlorinated by-products from vinyl chloride manufacture (dichloroethane tars)
SO - Inst. Vatten- Luftvardsforsk., [Publ.] B; ISS B 402,, 1978,27 pp.
LA - SWE
CD - IVLBD
AB - CBAC COPYRIGHT: CHEM ABS The enrichment factors for different components of the dichloroethane tar complex, as detd. in accumulation expts. with marine organisms, are 15-300. The lowest concn. of the tar causing subacute effects on marine organisms was 0.5-2 mg/L. The main components of the tar, ClCH2CH2Cl (I) and Cl2CHCH2Cl, contribute to the obsd. toxic effects to a very small extent. (107-06-2 1,2-Dichloroethane)(79-00-5 1,1,2-Trichloroethane) I gives a clearly pos. reaction in the Ames test, i.e., it is genetically active.
RN - 107-06-2; 79-00-5; 75-01-4
EM - 7810

170 SI - CA/089/116893K
AU - Sordelli D ; Carcassoni B ; Bernardini A ; Genova F
AD - Montedison S.p.A., Milan, Italy
TI - System for monitoring airborne vinyl chloride in the workroom environment
SO - Chim. Ind. (Milan); VOL 60, ISS 2, 1978,97-103
LA - ITA
CD - CINMA
AB - CBAC COPYRIGHT: CHEM ABS A system of automatic gas anal. by a gas chromatog. is described. Alarms are sounded when the pollution approaches dangerous levels.
RN - 75-01-4
EM - 7810

171 SI - CA/089/135030T
AU - Bjerke W
AD - Norsk Hydro, Rafnes, Norway
TI - Petrochemical industry. Purification technology and discharges at Rafnes [Norway]
SO - Kjemi; VOL 38, ISS 1, 1978,37-9
LA - NOR
CD - KJEMA
AB - CBAC COPYRIGHT: CHEM ABS Treatment of wastewater from the prodn. of vinyl chloride and C2H4 is described. (75-01-4 Vinyl chloride)(74-85-1 Ethylene) Limits for the discharge of these petrochem. effluents are reported.
RN - 75-01-4; 74-85-1
EM - 7810

172 SI - CA/089/134933C
AU - Miyauchi T ; Ono M ; Kakuta A
AD - Japan
TI - Removal of pollutant gases from air
SO - Japan. Kokai PATENT NO. 78 42181 04/17/78 (Tokyo Shibaura Electric Co., Ltd.)
AB - CBAC COPYRIGHT: CHEM ABS Air contg. pollutant gases such as C2H3Cl, C2H3CN, SO2, H2S, CS2, NO, N2O, and NO2 is passed through silicone oil. (75-01-4 Chloroethylene)
RN - 75-01-4
EM - 7810

173 SI - CA/089/134834W
AU - Carassiti V ; Chiorboli C ; Bignozzi CA ; Ferri A ; Maldotti A
AD - Cent. Studio, CNR, Ferrara, Italy
TI - Atmospheric photooxidation of vinyl chloride: a generalized treatment of the relative rates of product formation
SO - Ann. Chim. (Rome); VOL 67, ISS 7-8, 1978,499-512
LA - ENG
CD - ANCRA
AB - CBAC COPYRIGHT: CHEM ABS The spectral actinic irradiance values at latitude 45.degree.N, valid for the av. Po valley, are estd. as a function of time of the day, season, and of the wavelengths involved in photochem. smog systems. The reactivity of vinyl chloride (I) in these systems and the mechanism of atm. photooxidn. are discussed. (75-01-4 Vinyl chloride) The relative importance of the hydrocarbons emitted in industrial atm. in producing photochem. smog is dependent on the disappearance rate and on the product formation rate. Times for 50% disappearance of I are estd. and its reaction rate and product formation rate are compared with those of C2H4, in terms of ratio of product concn. vs. time plots. (74-85-1 Ethylene) These generalized plots of the av. relative formation rates are utilized as forecast diagrams of first approxn.
RN - 75-01-4; 74-85-1; 10102-43-9
EM - 7810

174 SI - CA/089/101251A
AU - Muratov MM ; Gus'kova SI
AD - Usb. Nauchno-Issled. Inst. Sanit. Gig. Profzabol., Tashkent, USSR
TI - Mutagenic activity of vinyl chloride
SO - Gig. Sanit.; ISS 7, 1978,111-12
LA - RUS
CD - GISAA
AB - CBAC COPYRIGHT: CHEM ABS Continuous exposure of rats to vinyl chloride at 0.15, 0.4, or 10 mg/m3 for 3.5 mo increased the incidence of chromosomal fragmentation, agglutination, and bridging. (75-01-4 Vinyl chloride) The no. of chromosomal aberrations was somewhat greater at 35.degree. than at 22.degree.. Vinyl chloride was nonmutagenic at 0.07 mg/m3.
RN - 75-01-4
DTG - CHRONIC TOXIC DOSE

EM - 7810

175 SI - CA/089/101001U
AU - Bolt HM
AD - Inst. Toxicol., Univ. Tuebingen, Tuebingen, Ger.
TI - Pharmacokinetics of vinyl chloride
SO - Gen. Pharmacol.; VOL 9, ISS 2, 1978,91-5
LA - ENG
CD - GEPHD
AB - CBAC COPYRIGHT: CHEM ABS A review with 25 refs. on the pharmacokinetics of vinyl chloride in rats. (75-01-4 Vinyl chloride)
RN - 75-01-4
DTG - URINE CONCENTRATION
EM - 7810

176 SI - CA/089/064180D
AU - Chmielarska H ; Zielenski K
AD - Osr. Badaw.-Rozwojowy Kaucz. Tworzyw Winylowych, Oswiecim, Pol.
TI - Study of vinyl chloride adsorption on activated carbon
SO - Przem. Chem.; VOL 57, ISS 4, 1978,193-5
LA - POL
CD - PRCHA
AB - CBAC COPYRIGHT: CHEM ABS Vinyl chloride adsorption on Polish active C N was investigated. (75-01-4 Vinyl chloride) The adsorption isotherm was measured and the kinetics of the process were detd. The C is a good adsorbent for vinyl chloride and is regenerated well by steam.
RN - 75-01-4; 7440-44-0
EM - 7809

177 SI - CA/089/094336B
AU - Wagoner JK ; Hyg SD
AD - Off. Assistant Secr., OSHA, Washington, D. C.
TI - Vinyl chloride and pulmonary cancer
SO - J. Environ. Pathol. Toxicol.; VOL 1, ISS 3, 1978,361-2
LA - ENG
CD - JEPTD
AB - CBAC COPYRIGHT: CHEM ABS A polemic. The conclusion of G. Reznik et al (ibid. 1977, 1, 105-111) that a case of adenocarcinoma of the bronchus in an org. chemist could not be attributed to exposure to vinyl chloride but was due to exposure to bis(chloromethyl ether) is not supported by published data. (75-01-4 Vinyl chloride)
RN - 75-01-4
EM - 7809

178 SI - CA/089/094295N
AU - Ball GW ; Parker RB ; Stevens K
AD - G.W.B. Electron. Ltd., Hayes/Middlesex, Engl.
TI - The mass spectrometer as a continuous monitor for pollutants and toxic hazards
SO - Adv. Mass Spectrom.; VOL 7B,, 1978,1687-90
LA - ENG
CD - AMSPA
AB - CBAC COPYRIGHT: CHEM ABS Air pollution by vinyl chloride in the prodn. of PVC was monitored by a transportable mass spectrometer (EMI monitor). (75-01-4 Vinyl chloride)(9002-86-2 PVC)
RN - 75-01-4; 9002-86-2
EM - 7809

179 SI - CA/089/085389U
AU - Timar M ; Haber J ; Mandi A ; Galgoczy G
AD - Baranya Megyei Tud. Kozl., Orsz. Munka- Uzemegeszsegugyi Intez., Budapest, Hung.
TI - The identification of vinyl chloride in various substances
SO - Munkavedelem; VOL 24, ISS 1-3, 1978,39-45
LA - HUN
CD - MUNKA
AB - CBAC COPYRIGHT: CHEM ABS Vinyl chloride was detd. in air, blood, and water by gas chromatog. using N as a carrier gas. (75-01-4 Vinyl chloride) From air, vinyl chloride was adsorbed on activated C and desorbed either by, rapid thermal desorption, or by using CS2 as a solvent. A Vendarex Q column was used in case of solvent desorption and a chromosorb 102 column in case of thermal desorption. The rapid thermal desorption was carried out at 350.degree.. In blood, vinyl chloride was detd. following diln. with water, addn. of octyl alc. and N sweeping. The detn. threshold was 0.06 ppm in rat blood. No addn. of octyl alc. was required for detn. in water. The threshold was 20 ppb.
RN - 75-01-4; 7732-18-5
EM - 7809

180 SI - CA/088/109735M
AU - Mayer A ; Comera J ; Charpentier H ; Jaussaud C
AD - Univ. Bremen, Bremen, Ger.
TI - Absorption coefficients of various pollutant gases at carbon dioxide laser wavelengths; application to the remote sensing of those pollutants
SO - Appl. Opt.; VOL 17, ISS 3, 1978,391-3
LA - ENG
CD - APOPA
AB - CBAC COPYRIGHT: CHEM ABS A 2-wavelength CO2 laser designed for atm. pollution measurements was used for detg. the absorption coeffs. of 13 gas pollutants at CO2 laser lines between 9.2 mum and 10.8 .mu.m. All measurements were done with the pollutant at a low pressure in the presence of 1 atm of air. Sensitivities of .apprx.5 ppb for a 1-km path were obtained for ethylene. (74-85-1 Ethylene)

RN - 74-85-1; 71-43-2; 74-93-1; 75-00-3; 75-01-4; 75-69-4; 75-71-8; 79-01-6; 106-99-0; 107-06-2; 126-99-8; 127-18-4; 7446-09-5; 7664-41-7
EM - 7804

181 SI - CA/094/115656B
AU - Mueller G ; Norpoth K
AD - Inst. Staublungenforsch., Univ. Muenster, Muenster
TI - Studies on the biotransformation of indirectly active carcinogenic industrial substances in mammals
SO - Moeglichkeiten Grenzen Biol. Monit./Arbeitsmed. Probl. Dienstleitungsgewerbes/Arbeitsmed. Kolloq., B; 1978,83-8
LA - GER
CD - 44JJA
AB - CBAC COPYRIGHT: CHEM ABS ADDENDUM The mutagenic effect of acetamide, benzene, chloroform, 1,1-dimethylhydrazine, and hexamethylphosphoric acid triamide (I) on Escherichia coli and Salmonella typhimurium was independent of dose. (60-35-5 Acetamide)(71-43-2 Benzene)(67-66-3 Chloroform)(57-14-7 1,1-Dimethylhydrazine)(680-31-9 hexamethylphosphoric acid triamide) I underwent oxidative demethylation in rats which released formaldehyde. (50-00-0 Formaldehyde) Dichlorodiethyl ether (II) showed a dose-dependent mutagenicity in Enterobacteriaceae oxygenase test. (27753-54-4 Dichlorodiethyl ether) II was metabolized to chloracetaldehyde which was coupled with glutathione and over S-carboxymethylcysteine degraded to thiodiglycolic acid. (107-20-0 Chloracetaldehyde)(70-18-8 Glutathione)(638-23-3 S-Carboxymethylcysteine)(123-93-3 Thiodiglycolic acid) This metabolic pathway elucidates the carcinogenic effect of II. Thiodiglycolic acid also was found in the urine of rats treated with chloroethanol. (107-07-3 Chloroethanol) Inhalation of vinyl chloride by rats resulted in urinary excretion of a reactive electrophilic metabolite. (75-01-4 Vinyl chloride)
RN - 60-35-5; 71-43-2; 67-66-3; 57-14-7; 680-31-9; 50-00-0; 27753-54-4; 107-20-0; 70-18-8; 638-23-3; 123-93-3; 107-07-3; 75-01-4
EM - 8110

182 SI - CA/090/001203P
AU - Juhnke I ; Luedemann D
AD - Krefeld, Ger.
TI - Results of the study of 200 chemical compounds on acute fish toxicity using the Golden Orfe test
SO - Z. Wasser Abwasser Forsch.; VOL 11, ISS 5, 1978,161-4
LA - GER
CD - ZWABA
AB - CBAC COPYRIGHT: CHEM ABS ADDENDUM Lethal concn. values for 200 chems. as detd. by the golden orfe test of H. Mann (1976) in 2 different labs. are given.
RN - 50-00-0; 50-29-3; 56-23-5; 56-38-2; 56-81-5; 57-13-6; 58-89-9; 60-29-7; 60-35-5; 62-53-3; 63-25-2; 64-17-5; 64-19-7; 65-85-0; 67-56-1; 67-63-0; 67-64-1; 67-66-3; 71-43-2; 75-01-4; 75-04-7;

75-05-8; 75-07-0; 75-09-2; 75-15-0; 75-85-4; 75-86-5; 76-03-9;
77-92-9; 78-82-0; 78-83-1; 78-92-2; 78-93-3; 79-01-6; 79-10-7;
80-15-9; 83-62-6; 84-66-2; 87-68-3; 88-72-2; 88-85-7; 88-89-1;
90-02-8; 93-76-5; 95-49-8; 95-50-1; 95-53-4; 95-68-1; 95-92-1;
95-93-2; 96-33-3; 96-41-3; 98-00-0; 98-01-1; 98-06-6; 98-07-7;
98-82-8; 98-95-3; 99-65-0; 100-01-6; 100-41-4; 100-42-5;
100-44-7; 100-47-0; 100-52-7; 100-66-3; 101-81-5; 101-84-8;
102-71-6; 104-75-6; 105-37-3; 106-68-3; 106-89-8; 107-02-8;
107-05-1; 107-11-9; 107-13-1; 107-15-3; 107-19-7; 107-21-1;
107-92-6; 108-05-4; 108-10-1; 108-21-4; 108-24-7; 108-39-4;
108-88-3; 108-90-7; 108-91-8; 108-94-1; 108-95-2; 109-57-9;
109-60-4; 109-86-4; 109-99-9; 110-12-3; 110-19-0; 110-54-3;
110-63-4; 110-82-7; 110-83-8; 110-86-1; 111-27-3; 111-42-2;
111-46-6; 111-70-6; 111-87-5; 112-27-6; 112-30-1; 112-34-5;
120-83-2; 120-92-3; 122-79-2; 123-01-3; 123-31-9; 123-42-2;
123-54-6; 123-72-8; 123-86-4; 123-91-1; 126-73-8; 131-17-9;
135-01-3; 138-86-3; 139-13-9; 141-32-2; 141-43-5; 141-78-6;
141-97-9; 142-82-5; 142-96-1; 143-33-9; 144-49-0; 144-62-7;
150-76-5; 151-21-3; 291-64-5; 301-04-2; 302-17-0; 534-22-5;
540-88-5; 541-35-5; 542-59-6; 554-12-1; 583-60-8; 592-76-7;
622-45-7; 623-37-0; 626-93-7; 628-63-7; 628-81-9; 628-92-2;
1310-73-2; 1313-82-2; 1330-20-7; 1333-73-9; 1746-81-2; 1912-24-9;
7379-28-4; 7447-40-7; 7631-99-4; 7632-05-5; 7646-85-7; 7647-01-0;
7647-15-6; 7681-49-4; 7681-82-5; 7718-54-9; 7758-98-7; 7761-88-8;
7778-43-0; 7778-74-7; 7803-57-8; 10102-18-8; 10325-94-7;
10361-37-2; 10588-01-9; 13348-43-1; 13597-99-4; 13746-98-0;
14459-60-0; 17619-22-6; 25323-89-1; 26952-21-6; 30899-19-5;
35296-72-1; 51312-24-4; 62309-51-7; 68563-01-9; 68563-02-0;
110-91-8
EM - 8007

183 SI - CA/088/165026T
AU - Kurlyandskii BA ; Tomilina LA ; Dukhovnaya AI ; Stovbur NN
AD - Gorodskaya Sanepidstants., Moscow, USSR
TI - Pathogenesis of cardiovascular dysfunction during chronic poisoning with vinyl chloride
SO - Gig. Sanit.; ISS 2, 1978,104-5
LA - RUS
CD - GISAA
AB - CBAC COPYRIGHT: CHEM ABS ADDENDUM Vinyl chloride inhaled by rats at 300 mg/m3 for 4.5 h daily initially activated the sympathetic and then the parasympathetic nervous system. (75-01-4 vinyl chloride) After 7 mo inhalation at 20 mg/m3 vinyl chloride stimulated the parasympathetic nervous system. Adrenaline loading initially increased and then decreased the sensitivity of adrenoreceptors to vinyl chloride. Chronic exposure to vinyl chloride disrupted the neuroautonomic and cardiovascular functions, with initial compensatory changes in the neurohormonal balance and subsequent disruption of the autonomic regulation with a dominant parasympathetic influence.
RN - 75-01-4
EM - 8007

184 SI - CA/090/126557P
AU - Kotlyar IB ; Seregina AI
AD - USSR
TI - Protection of the environment from vinyl chloride contamination in poly(vinyl chloride) production
SO - Plast. Massy; ISS 10, 1978,58-61
LA - RUS
CD - PLMSA
AB - CBAC COPYRIGHT: CHEM ABS A review with 99 refs. Review vinyl chloride environment protection PVC manuf environment protection review
RN - 75-01-4; 9002-86-2
EM - 7904

185 SI - CA/090/109108A
AU - Leichnitz K
AD - Ger.
TI - Some information on a long-term measuring system for gases and vapors
SO - Draegerheft; VOL 312,, 1978,27-34
LA - GER
CD - DRAEA
AB - CBAC COPYRIGHT: CHEM ABS The use of Draeger tubes in the long-term detn of NH3, C6H6, HCN, Cl, chloroprene, CO, CO2, hydrocarbons, HCl, SO2, H2S, NO2, NOx, PhMe, C2HCl3, and vinyl chloride in air is described. (71-43-2 Benzene)(126-99-8 Chloroprene)(108-88-3 Toluene)(79-01-6 Trichloroethylene)(75-01-4 Vinyl chloride)
RN - 71-43-2; 126-99-8; 108-88-3; 79-01-6; 75-01-4; 74-90-8; 124-38-9; 630-08-0; 7446-09-5; 7647-01-0; 7664-41-7; 7782-50-5; 7783-06-4; 10102-44-0; 11104-93-1
EM - 7904

186 SI - CA/090/109085R
AU - Kohl EG ; Pruggmeyer D
AD - Battelle-Inst. e. V., Frankfurt/Main, Ger.
TI - Air pollution caused by vinyl chloride from PVC factories
SO - Ber. - Umweltbundesamt (Ger.); ISS 5, 1978,23 pp.
LA - GER
CD - BEUMD
AB - CBAC COPYRIGHT: CHEM ABS The vinyl chloride (I) content of German PVC samples (emulsion, suspension, bulk) was substantially <10 ppm, except for 3 samples from the same firm, in which I concns. were 44, 81, and 82 ppm. (75-01-4 Vinyl chloride)(9002-86-2 PVC) In foreign PVC, I concns. were generally <10 ppm, but 20% of the samples contained substantially >100 ppm I. In 67 finished products, I concns. were <0.1 ppm for 50 and <5 ppm for 5, with the exception of insulating panels, of which 9 contained 20-50 ppm I and 3 contained 109-973 ppm I. The concn. and emission of I for a given sample of PVC during various stages of processing are discussed, and a simple method for monitoring the I content, particularly at >10 ppm in PVC raw

materials, is described.
RN - 75-01-4; 9002-86-2
EM - 7904

187 SI - CA/090/098506A
AU - Kahn MS
AD - Rutgers, State Univ., New Brunswick, N. J.
TI - The mechanism of ethylene and vinyl chloride as initiators in banana ripening
SO - Diss. Abstr. Int. B 1979, 39(7), 3223-4; 1978,100 pp.
LA - ENG
CD - DABBB
AB - CBAC COPYRIGHT: CHEM ABS A disser. Banana maturation ethylene vinyl chloride
RN - 74-85-1; 75-01-4
EM - 7904

188 SI - CA/090/098263U
AU - Ibrahim FB
AD - Rutgers, State Univ., New Brunswick, N. J.
TI - Effect of vinyl chloride on metabolites of germinated seeds
SO - Diss. Abstr. Int. B 1979, 39(7), 3282; 1978,101 pp.
LA - ENG
CD - DABBB
AB - CBAC COPYRIGHT: CHEM ABS A disser. Vinyl chloride seed germination metabolite
RN - 75-01-4
EM - 7904

189 SI - CA/090/076013K
AU - Sudduth JR ; Keyworth DA
AD - USA
TI - Purification of gas streams
SO - U.S. PATENT NO. 4104146 08/01/78 (Tenneco Chemicals, Inc.)
AB - CBAC COPYRIGHT: CHEM ABS The gas stream, contg. 10-1000 ppm vinyl chloride (I) from heating of a polymn. slurry, is passed at specific rates through a silent elec. discharge zone in an O3-generating app. to destroy .gtoreq.95% of the I content and result in a stream contg. .ltoreq.10 ppm I. (75-01-4 Vinyl chloride) Thus, when an air stream (contg. 282 ppm I) was passed at 0.33 L/min through a silent elec. discharge zone in an ozonator, 99.3% of the I content was destroyed 1 min after emergence from the ozonator (the I content was further reduced by reaction with O3 formed in the ozonator).
RN - 75-01-4; 9002-86-2; 10028-15-6
EM - 7903

190 SI - CA/090/075908U
AU - Miller B ; Kane PO ; Robinson DB ; Whittingham PJ
AD - Mond Div., ICI Ltd., Runcorn, Engl.
TI - Determination of a 24-hour time-weighted average value of environmental vinyl chloride monomer concentration by charcoal adsorption followed by gas chromatography
SO - Analyst (London); VOL 103, ISS 1232, 1978,1165-72
LA - ENG
CD - ANALA
AB - CBAC COPYRIGHT: CHEM ABS The concn. of CH2:CHCl in the atm. was detd. by drawing atm. through a tube packed with activated charcoal for 24 h, extg. the adsorbed CH2:CHCl into CS2, and detg. the extd. CH2:CHCl by gas chromatog. (75-01-4 Vinyl chloride) The detection limit is 0.005 vol. ppm and the precision is .+-.10% relative under lab conditions. Interference by other atm. pollutants, e.g. Cl or CH2CCl2, is negligible. The technique was tested at 2 flow rates and at 2 industrial sites. The agreement between the expts. at different flow rates is .+-.10% relative.
RN - 75-01-4
EM - 7903

191 SI - CA/090/075897Q
AU - Pochon M
AD - Lonza A.-G., Visp, Switz.
TI - Measurement of vinyl chloride (VCM) in the atmosphere with portable and stationary systems
SO - Chimia; VOL 32, ISS 12, 1978,488-96
LA - GER
CD - CHIMA
AB - CBAC COPYRIGHT: CHEM ABS The detn. of vinyl chloride in air by color test tubes, gas sampling tubes with gas chromatog., sample bags, portable detectors with solid-state sensors, halide detectors, flammable gas detectors, personal sampling pumps, IR spectrometers, monitors with test papers tapes, flame-ionization monitors, and process gas chromatographs is discussed. (75-01-4 Vinyl chloride)
RN - 75-01-4
EM - 7903

192 SI - CA/090/075888N
AU - Santoleri JJ
AD - Trane Therm. Co., Conshohocken, Pa.
TI - Thermal oxidation: a solution to the VCM emissions problem
SO - Book Proc. Annu. Ind. Air Pollut./Contam. Control Semin.; VOL 8,, 1978,Paper No. 11, 9 pp.
LA - ENG
CD - BPASD
AB - CBAC COPYRIGHT: CHEM ABS Vinyl chloride monomer and other hydrocarbons in air or waste gas were combusted in a vortex burner to remove the pollutants. (75-01-4 Vinyl chloride) By-product heat and HCl were recovered. The thermal oxidn.

method can handle air contg. 4-21.7% vinyl chloride.
RN - 75-01-4; 7647-01-0
EM - 7903

193 SI - CA/090/060498M
AU - Asendorf E ; Albrecht P ; Hoepfner B
AD - Ger.
TI - Method and apparatus for determining halogen-carbon and halogen-hydrogen compounds, especially vinyl chloride
SO - Ger. Offen. PATENT NO. 2716963 10/19/78
AB - CBAC COPYRIGHT: CHEM ABS The content of halogen-C compds. in waste gases is detd. continuously by catalytic thermal hydrolysis in the presence of H2O at 550-650.degree. with the formation of XH (X = halogen), absorption of XH in deionized H2O, and measuring the elec. cond. of the H2O. A Pt or Pt-alloy wire is used as the heating element and catalyst. The content of vinyl chloride is detd. from the difference of the readings for 2 gas streams converted at 580 and 450.degree., resp. (75-01-4 vinyl chloride) Vinyl chloride and all other X-C compds. are thermally hydrolyzed at 580.degree., whereas only the accompanying X-C compds. (not vinyl chloride) are thermally hydrolyzed at 450.degree.. An alarm signal is actuated when the difference between these 2 readings exceeds a preset value.
RN - 75-01-4
EM - 7903

194 SI - CA/090/060450Q
AU - Khan ZS ; Hughes TW
AD - Monsanto Res. Corp., Dayton, Ohio
TI - Source assessment: polyvinyl chloride
SO - Report; ISS EPA/600/2-78/0041, MRC-DA-700; Order No. PB-283395,, 1978,107 pp.
LA - ENG
CD - D8REP
AB - CBAC COPYRIGHT: CHEM ABS This report summarizes data on air emissions from the PVC industry. (9002-86-2 PVC) PVC is manufd. by 20 companies at 35 plants. Each plant uses .gtoreq.1 of 4 possible polymn. processes: (1) suspension polymn.: (2) emulsion polymn.: (3) bulk polymn.: and (4) soln. polymn. A representative PVC plant was defined to assess the severity of emissions from this industry. Source severity, defined as the ratio of the time-averaged max. ground level concn. of a pollutant to a hazard potential, was calcd. for 16 chem. species emitted from a representative plant. The 2 largest severities were 970 for vinyl chloride and 1.9 for PVC. (75-01-4 Vinyl chloride) Control technol. for hydrocarbons includes adsorption, absorption, refrigeration, incineration, stripping, purging of equipment with inert gas or water, and control of fugitive emissions.
RN - 9002-86-2; 75-01-4
EM - 7903

195 SI - CA/090/060352J
AU - McMurry JR ; Tarr J
AD - Texas Air Control Board, Tex.
TI - Vinyl chloride in Texas' ambient air
SO - Proc., Annu. Tech. Meet. - Inst. Environ. Sci.; VOL 24, ISS Comb. Environ. Technol. Interrelat., 1978,149-53
LA - ENG
CD - IESPA
AB - CBAC COPYRIGHT: CHEM ABS Gas chromatog. is used for measurement of ambient air concns. of vinyl chloride (I) at lower abs. detectable limits of 0.2 nL and a relative extd. deviation of 20%. (75-01-4 Vinyl chloride) Existing ambient air concns. of I in Texas (.ltoreq.13 ppb/vol.) do represent a possible hazard.
RN - 75-01-4
EM - 7903

196 SI - CA/090/081858U
AU - Simmon VF
AD - Stanford Res. Inst., Menlo Park, Calif.
TI - Structural correlations of carcinogenic and mutagenic alkyl halides
SO - DHEW Publ. (FDA) (U. S.); ISS FDA 78-1046, Struct. Correl. Carcinog. Mutagen.,, 1978,163-71
LA - ENG
CD - DHEFD
AB - CBAC COPYRIGHT: CHEM ABS Eight of 10 carcinogenic alkyl halides were mutagenic in Salmonella typhimurium TA100; the exceptions were CHCl3 and CCl4. (67-66-3 Chloroform)(56-23-5 Carbon tetrachloride) Thirteen alkyl halides of unknown carcinogenic activity were mutagenic in these assays. Of particular interest was the mutagenic activity of CH2Cl2, which is produced in excess of 100,000 tons annually and which has a broad environmental exposure. (75-09-2 Methylene chloride) The mutagenic activity of the alkyl halides correlated well with their known chem. reactivity.
RN - 67-66-3; 56-23-5; 75-09-2; 74-83-9; 74-87-3; 74-88-4; 74-95-3; 74-97-5; 75-01-4; 75-25-2; 75-27-4; 75-35-4; 79-01-6; 87-68-3; 106-89-8; 107-05-1; 107-94-8; 111-44-4; 124-48-1; 141-76-4; 590-21-6; 590-92-1; 39638-32-9
EM - 7903

197 SI - CA/090/049100E
AD - Natl. Inst. Occup. Saf. Health, Rockville, Md.
TI - Current Intelligence Bulletin 28: vinyl halides carcinogenicity. Vinyl bromide, vinyl chloride, and vinylidene chloride
SO - DHEW (NIOSH) Publ. (U. S.); ISS 79-102,, 1978,11 pp.
LA - ENG
CD - DNPUD
AB - CBAC COPYRIGHT: CHEM ABS A review with 35 refs. on the carcinogenicity of vinyl bromide, vinyl chloride, and vinylidene chloride. (593-60-2 Vinyl bromide)(75-01-4 Vinyl chloride)(75-35-4 Vinylidene chloride)

RN - 593-60-2; 75-01-4; 75-35-4
EM - 7903

198 SI - CA/090/043368B
AU - Berg S ; Frostling H ; Jacobsson S
AD - Dep. Anal. Chem., Univ. Stockholm, Stockholm, Swed.
TI - Chemical analysis of fire gases with gas chromatography-mass spectrometry
SO - Int. Symp. Control Air Pollut. Work. Environ., [Proc.]; VOL Part 1,, 1978,309-21
LA - ENG
CD - 39PRA
AB - CBAC COPYRIGHT: CHEM ABS Hazardous gases from fires were analyzed by gas chromatog.-mass spectroscopy. The gases were sampled in glass tubes, eluted with He, concd. in a cooling trap, sepd. in a glass column on Tenax GC. Alkanes, alkenes, lower monohydric alcs., AcH, furan, and C6H6 derivs. occur in fires in dwelling house. (75-07-0 Acetaldehyde)(110-00-9 Furan)(71-43-2 Benzene) N compds. occur in fires from polyurethane foams.
RN - 75-07-0; 110-00-9; 71-43-2; 64-17-5; 67-56-1; 67-64-1; 74-85-1; 74-86-2; 74-87-3; 74-90-8; 74-99-7; 75-01-4; 75-05-8; 75-52-5; 78-93-3; 91-20-3; 92-52-4; 95-13-6; 98-01-1; 98-88-4; 100-42-5; 100-47-0; 100-52-7; 106-97-8; 106-98-9; 106-99-0; 107-12-0; 107-13-1; 107-31-3; 107-87-9; 108-08-7; 108-88-3; 108-90-7; 108-95-2; 109-02-4; 109-66-0; 109-67-1; 110-54-3; 110-86-1; 111-65-9; 111-66-0; 115-07-1; 120-92-3; 126-98-7; 142-29-0; 142-82-5; 271-89-6; 542-92-7; 592-41-6; 620-02-0; 689-97-4; 1319-73-9; 1321-94-4; 4170-30-3; 12002-48-1; 25321-22-6; 25495-88-9; 25550-22-5; 25586-38-3; 26760-64-5; 27137-41-3; 28802-49-5; 37275-41-5; 38719-68-5; 50985-84-7; 68923-44-4
EM - 7902

199 SI - CA/090/043308G
AU - Anderson HA ; Snyder J ; Lewinson T ; Woo C ; Lilis R
AU - Selikoff IJ
AD - Mt. Sinai Sch. Med., City Univ. New York, New York, N. Y.
TI - Levels of CEA among vinyl chloride and poly(vinyl chloride)-exposed workers
SO - Cancer (Philadelphia); VOL 42, ISS 3, Suppl., 1978,1560-7
LA - ENG
CD - CANCA
AB - CBAC COPYRIGHT: CHEM ABS In 1974, vinyl chloride (VC) exposed workers had an increased risk of malignant disease (hemangiosarcoma of the liver). (75-01-4 Vinyl chloride) Thus 1147 workers exposed to VC monomer in 3 VC/poly(vinyl chloride) (PVC) . plants and 269 workers from a PVC extrusion plant manufg. PVC textile product, exposed to much lower concns. of VC were examd. (9002-86-2 Poly(vinyl chloride)) Included among the comprehensive clin. and lab. studies conducted was the CEA (carcinoembryonic antigen) titer. The investigation demonstrated that occupational exposures in VC/PVC plants can cause elevations in the CEA titers of otherwise healthy individuals. Prospective follow-up is necessary before conclusions can be drawn concerning

the usefulness of the CEA titer as a predictive indicator of possible increased risk.
RN - 75-01-4; 9002-86-2
EM - 7902

200 SI - CA/090/017285C
AU - Bingham E
AD - USA
TI - Research methods employed in the evaluation of volatile agents on biological systems
SO - Int. Symp. Control Air Pollut. Work. Environ., [Proc.]; VOL Part 1,, 1978,29-41
LA - ENG
CD - 39PRA
AB - CBAC COPYRIGHT: CHEM ABS In rats exposed chronically (60 wk) to EtOH (5%) and vinyl chloride (600 ppm) liver tumors occurred earlier and more frequently than in rats exposed to just EtOH or vinyl chloride. (64-17-5 Ethanol)(75-01-4 Vinyl chloride) The setting of safe exposure limits for industry in the face of the synergism of environmental agents with individual toxic agents is discussed.
RN - 64-17-5; 75-01-4
DTG - CHRONIC TOXIC DOSE
EM - 7902

201 SI - CA/090/034611Y
AU - Winell M ; Holmberg B ; Kronevi T
AD - Unit Occup. Toxicol., Natl. Board Occup. Saf. Health, Swed.
TI - A possible correlation between biochemical changes and pathological findings in VCM-exposed mice and hamsters
SO - Int. Symp. Control Air Pollut. Work. Environ., [Proc.]; VOL Part 1,, 1978,152-66
LA - ENG
CD - 39PRA
AB - CBAC COPYRIGHT: CHEM ABS Mice and hamsters were exposed by inhalation to 50 and/or 500 ppm vinyl chloride monomer (VCM) during 6-18 mo. (75-01-4 Vinyl chloride) Blood samples were taken at regular intervals during the exposure for anal. of plasma enzymes indicative of liver damage or early malignancy. Some animals were sacrificed for histopathol. examns. after 6 mo and the rest were examd. when dead or moribund. Alk. phosphatase and total lactate dehydrogenase (LDH) activities were elevated in VCM exposed mice. There was also a shift towards cathodic isoenzymes of LDH. The transaminases were not significantly elevated. No changes in plasma enzymes were found in exposed hamsters. Pathol. examn. of VCM-exposed mice showed the presence of hemangiosarcomas in fat tissue, histol. benign alveologenic lung adenomas as well as a few benign and malignant tumors at various sites. Only 1 liver hemangiosarcoma was noted. No liver fibrosis was seen. All mice exposed to 50 ppm VCM for 76 mo developed tumors. Tumor incidence was high also in the hamsters. Enzyme changes occurred late in the study, subsequent to tumor appearance. The value of enzyme changes as a diagnostic

criterion on tissue injury or early malignancy caused by VCM was discussed.
RN - 75-01-4
DTG - CHRONIC TOXIC DOSE
EM - 7902

202 SI - CA/090/028367G
AU - Anon
AD - Engl.
TI - Removal of vinyl chloride monomer from gases
SO - Res. Discl.; VOL 175,, 1978,5
LA - ENG
CD - RSDSB
AB - CBAC COPYRIGHT: CHEM ABS Vinyl chloride vapors were selectively removed from waste gases from PVC prodn. by treating the gas with ether acetates, diacetates, or triacetates. (75-01-4 Vinyl chloride)(9002-86-2 PVC)
RN - 75-01-4; 9002-86-2; 64-19-7
EM - 7902

203 SI - CA/090/011688Q
AU - Eisenstein AJ ; Frohreich RA ; Scamehorn JF
AD - USA
TI - Adiabatic VCM adsorption on carbon
SO - U.S. PATENT NO. 4098593 07/04/78 (Continental Oil Co.)
AB - CBAC COPYRIGHT: CHEM ABS The removal by dry C bed-adsorption of vinyl chloride (I) monomer nVCM) from waste gases in which the initial concn. of I is >12,000 ppm by vol. is improved by dilg. the waste gas with an inert gas to give a I concn. of 4000-12,000 ppm by vol. and adsorbing the I under essentially adiabatic conditions at .apprx.120 psig and initial bed temps. of 60-200.degree. F. (75-01-4 Vinyl chloride) The inert gas is selected from the group CO2, N, air, and waste gas from which I has been removed.
RN - 75-01-4; 7440-44-0
EM - 7901

204 SI - CA/089/220194U
AU - Sittig M
AD - USA
TI - Vinyl Chloride and PVC Manufacture: Process and Environmental Aspects
SO - 1978,354 pp.
CD - BOOKA
AB - CBAC COPYRIGHT: CHEM ABS A bock. Book vinyl chloride PVC environment Polyvinyl chloride manuf environment book
RN - 75-01-4; 9002-86-2
EM - 7901

205 SI - CA/089/220018Q
AU - Nestaas I ; Lundberg NH
AD - Norway
TI - First part of the Bamble study: background pollutant levels
SO - Kjemi; VOL 38, ISS 5, 1978,25-6, 29
LA - NOR
CD - KJEMA
AB - CBAC COPYRIGHT: CHEM ABS Prior to the establishment of new petroleum plants, the background levels of O3, PAN, NOx, hydrocarbons, SO2, SO42-, acidity in dust, vinyl chloride, and dust fallout were detd. (2278-22-0 PAN)(75-01-4 Vinyl chloride)
RN - 2278-22-0; 75-01-4; 7446-09-5; 10028-15-6; 11104-93-1
EM - 7901

206 SI - CA/089/203393R
AU - Yang K ; Reedy JD ; Lindberg RC
AD - USA
TI - Nitrite-impregnated carbon for the adsorption recovery of vinyl chloride monomer
SO - U.S. PATENT NO. 4081512 03/28/78 (Continental Oil Co.)
AB - CBAC COPYRIGHT: CHEM ABS The impregnation of active C with an inorg. nitrite greatly reduces the formation of C2H2 and CO2 in the adsorptive recovery of H2C:CHCl from gas streams. (74-86-2 Acetylene)(75-01-4 Vinyl chloride) For example, when a N feed contg. 10% H2C:CHCl and 1% O was passed through a C bed which had been prepd. by soaking 100 g C in 200 g water contg. 2 g NaNO2 and drying, the formation of C2H2 and CO2 as 100.degree. was 0.0 and 0.0mu mol/min, resp., compared with 0.0 and 1.7 for C treated with 2% hydroquinone and 0.12 and 0.8 for untreated C.
RN - 74-86-2; 75-01-4; 124-38-9; 7440-44-0; 7632-00-0
EM - 7901

207 SI - CA/089/203257Z
AU - Neu NP
AD - Comput. Cent., Solvay et Cie S. A., Brussels, Belg.
TI - Minicomputer connected to process-chromatographs for monitoring air pollutants in working areas
SO - Textes Conf. Cadre Congr. Int. "Contrib. Calc. Electron. Dev. Genie Chim. Chim. Ind."; VOL D,, 1978,44-9
LA - ENG
CD - 39EYA
AB - CBAC COPYRIGHT: CHEM ABS Air pollution by vinyl chloride during the prodn. of PVC was monitored by a gas chromatograph equipped with a minicomputer. (75-01-4 Vinyl chloride)(9002-86-2 PVC)
RN - 75-01-4; 9002-86-2
EM - 7901

208 SI - CA/089/203112Y
AU - Hoffmann D ; Schmeltz I ; Hecht SS ; Brunnemann KD ; Wynder EL
AD - Naylor Dana Inst. Dis. Prev., Am. Health Found., Valhalla, N. Y.
TI - Volatile carcinogens occurrence, formation and analysis
SO - Prev. Detect. Cancer, [Proc. Int. Symp.], 3rd; VOL 1, ISS 2, 1978,1943-59
LA - ENG
CD - 37ATA
AB - CBAC COPYRIGHT: CHEM ABS A review with 33 refs. covering vinyl chloride, chlorinated hydrocarbons, bis(chloromethyl)ether, N-nitrosamines, and hydrazines. (75-01-4 Vinyl chloride)(542-88-1 Bis(chloromethyl)ether)
RN - 75-01-4; 542-88-1; 302-01-2
EM - 7901

209 SI - CA/089/185395M
AU - Howland RG ; Wallace CJ
AD - Jet Propul. Lab., Pasadena, Calif.
TI - Chlorine and activated carbon treatment for removal of toxic substances from water
SO - Water Chlorination: Environ. Impact Health Eff., Proc. Conf.; VOL 2,, 1978,659-74
LA - ENG
CD - 37KXA
AB - CBAC COPYRIGHT: CHEM ABS For water systems requiring chlorination for disinfection, the inherent danger of such practice is greatly reduced when a C .fwdarw. Cl .fwdarw. C treatment is employed. Chlorination enhanced the removal of PhOH and aliph. amines, over that accomplished by C alone. (108-95-2 Phenol) For both the volatile halogenated orgs. and the hexene-extd. orgs., the effect of chlorinating at 50 ppm Cl caused no increased hazard over that incurred with 10 ppm Cl. The final C treatment reduced the hazard of releasing toxic Cl compds. into the environment.
RN - 108-95-2; 67-66-3; 74-89-5; 75-01-4; 75-25-2; 75-27-4; 107-10-8; 7440-44-0
EM - 7812

210 SI - CA/089/185129C
AD - Fr.
TI - Risks due to vinyl chloride monomer in poly(vinyl chloride) processing
SO - Cah. Notes Doc.; VOL 90,, 1978,167-72
LA - FRE
CD - CNDIB
AB - CBAC COPYRIGHT: CHEM ABS The release of vinyl chloride monomer vapor into the atm. from PVC during various handling and processing operations can be hazardous to health. (75-01-4 Vinyl chloride)(9002-86-2 PVC) The Tech. Commitee for French Wood Industries has specified a max. permissible concn. of 2 ppm by vol. for these emissions. A survey of the conditions under which the vapor is released, a detailed anal. of a wide range of

processing situations, and the appropriate ventilation methods to be adopted are given.
RN - 75-01-4; 9002-86-2
EM - 7812

211 SI - CA/089/185014M
AU - Greene MW ; Riccio SG ; Dencker WD ; Wilson RI
AD - Adv. Technol. Oper., Beckman Instrum., Inc., Anaheim, Calif.
TI - Chemiluminescent monitor for vinyl chloride
SO - U. S. NTIS, PB Rep.; ISS PB-277391,, 1978,51 pp.
LA - ENG
CD - XPBRC
AB - CBAC COPYRIGHT: CHEM ABS A monitor for vinyl chloride monomer (VCM) in ambient air was constructed using com. available components of a gas chromatog. (GC) coupled with a chemiluminescence O3 analyzer slightly modified to make it suitable for use as a GC detector. (75-01-4 Vinyl chloride) The specificity for VCM is enhanced by use of a chemiluminescence detector because satd. hydrocarbons do not chemiluminesce with O3. A custom absorption trap capable of concg. the VCM from 1 L (or more) of ambient air was used to extend the lower detection limit. Using a custom trap-heating circuit, the concd. sample can be thermally eluted into the GC in a gas vol. of 10 mL or less, providing a 100-fold increase in sensitivity compared to that obtained with a 10 mL sample loop. Preliminary system and final acceptance test results are reported in detail and indicate that a monitor of this type can detect <1 ppb of VCM in ambient air operating on a 15-min cycle. If the concn. trap is replaced by a 20 mL sample loop, the limit of detection is estd. to be about 35 ppb VCM when operating on a 5-min cycle.
RN - 75-01-4
EM - 7812

212 SI - CA/089/184865C
AU - Boyd RV Jr
AD - Eng. Dep., Ethyl Corp., Baton Rouge, La.
TI - Computer assisted monitoring system for vinyl chloride in ambient air
SO - Anal. Instrum.; VOL 16,, 1978,145-50
LA - ENG
CD - AINSB
AB - CBAC COPYRIGHT: CHEM ABS The ambient air monitoring system basically consists of 4 independent gas chromatog. analyzers with alarms plus a minicomputer for data processing. Monitoring system consists of a gas chromatog. multipoint sampling system (including time weighted av. sample accumulators), audible and visual field alarm network that facilitates protection of personnel from exposure to vinyl chloride, and the minicomputer data redn. and presentation formats. (75-01-4 Vinyl chloride)
RN - 75-01-4
EM - 7812

213 SI - CA/089/174626M
AU - Maly E
AD - Inst. Ind. Hyg. Occup. Med., Bratislava, Czech.
TI - On the reaction of vinyl chloride with DNA
SO - Int. Congr. Ser. - Excerpta Med.; VOL 440, ISS Ind. Environ. Xenobiotics, 1978,270-3
LA - ENG
CD - EXMDA
AB - CBAC COPYRIGHT: CHEM ABS Vinyl chloride reacted to a greater extent with denatured than with native herring sperm DNA in vitro in aq. soln. (75-01-4 Vinyl chloride) However, vinyl chloride failed to react with previously acylated calf thymus DNA in vitro in citrate buffer.
RN - 75-01-4
EM - 7812

214 SI - CA/089/174524J
AU - Koester U ; Albrecht D ; Kappus H
AD - Inst. Toxikol., Univ. Tuebingen, Tuebingen, Ger.
TI - Lipid peroxidation induced by different halogenated aliphatic hydrocarbons as measured by malondialdehyde formation in vitro and by ethane evolution in vivo
SO - Int. Congr. Ser. - Excerpta Med.; VOL 440, ISS Ind. Environ. Xenobiotics, 1978,235-7
LA - ENG
CD - EXMDA
AB - CBAC COPYRIGHT: CHEM ABS Ethane exhalation levels (as a monitor of in vivo lipid peroxidn.) of rats treated with 0.1 g CBrCl3/kg, 1 g CCl4/kg, 2% vinyl chloride, 4% halothane, and 2.5% trichloroethylene were 18, 37, 8, 14, and 6 nmol/kg, resp. (75-62-7 Bromotrichloromethane)(56-23-5 Carbon tetrachloride)(75-01-4 vinyl chloride)(151-67-7 halothane)(79-01-6 trichloroethylene) These results paralleled closely malonaldehyde formation (as a monitor of in vitro lipid peroxidn.) in in vitro studies.
RN - 75-62-7; 56-23-5; 75-01-4; 151-67-7; 79-01-6
EM - 7812

215 SI - CA/089/174464G
AU - Bolt HM ; Laib RJ ; Filser J ; Buchter A ; Bolt W
AD - Inst. Toxikol., Univ. Tuebingen, Tuebingen, Ger.
TI - Metabolic activation and disposition of vinyl chloride in vivo and in vitro
SO - Int. Congr. Ser. - Excerpta Med.; VOL 440, ISS Ind. Environ. Xenobiotics, 1978,261-3
LA - ENG
CD - EXMDA
AB - CBAC COPYRIGHT: CHEM ABS A review with 21 refs. on vinyl chloride metab. (75-01-4 Vinyl chloride)
RN - 75-01-4
EM - 7812

216 SI - CA/089/158411G
AU - Kneffei Z ; Desi I ; Farkas I
AD - Orsz. Kozegeszsegugyi Intez., Budapest, Hung.
TI - Study of the toxic effect of vinyl chloride monomer in animal tests
SO - Muanyag Gumi; VOL 15, ISS 4, 1978,125-6
LA - HUN
CD - MUGUA
AB - CBAC COPYRIGHT: CHEM ABS Chronic oral administration of vinyl chloride at 3-1200 mg/kg/day caused toxicity symptoms in rats, such as locomotor disturbances, decrease of the immune titer, electrocardiog. modifications, and loss of hair. (75-01-4 Vinyl chloride) The liver wt. was increased by 600 and 1200 mg vinyl chloride/kg.
RN - 75-01-4
EM - 7812

217 SI - CA/089/158314C
AU - Kurlyandskii BA ; Stovbur NN ; Dukhovnaya AI
AD - Mosk. Gorod. Sanepidstants., Moscow, USSR
TI - Probability assessent of the comparative sensitivity of body systems to vinyl chloride poisoning
SO - Gig. Sanit.; ISS 8, 1978,51-5
LA - RUS
CD - GISAA
AB - CBAC COPYRIGHT: CHEM ABS Rats were exposed for 4 h to inhalation of 0.4-4.4 g vinyl chloride/m3. (75-01-4 Vinyl chloride) The neuromuscular system was the most sensitive to the toxic action of vinyl chloride, followed by arterial pressure, hepatic function, and gonads. The reproductive system was affected only by the highest concn. of vinyl chloride.
RN - 75-01-4
EM - 7812

218 SI - CA/088/046173D
AU - So MS
AD - N. Korea
TI - Physico-chemical properties of vinyl monomers and their fungiostatic action
SO - Choson Minjujuui Inmin Konghwaguk Kwahagwon Tongbo; VOL 25, ISS 3, 1977,152-4
LA - KOR
CD - CKWTA
AB - CBAC COPYRIGHT: CHEM ABS ADDENDUM Antifungal activity was studied for 14 vinyl compds. and was in the order CH2:CHCl < CH2:CHCHO .apprxeq. CH2:CHCN < CH2:CHCH2OH < CH2:CHCO2H < CH2:CHPh < 4-vinylpyridine (I), Me < Et < Br < Bu in terms of R group in CH2:CHOR, and butadiene < isoprene < chloroprene. The antifungal activity of I was 120-fold greater than that of CH2:CHCl.
RN - 75-01-4; 107-02-8; 107-13-1; 107-18-6; 79-10-7; 100-42-5; 100-43-6; 80-62-6; 97-88-1; 818-44-0; 75-35-4; 79-41-4; 98-83-9;

276 SI - CA/096/011442D
CC - CA/161003
AU - Kaufmann RF ; Gleason TA ; Ellwood RB ; Lindsey GP
TI - Ground-water monitoring techniques for arid zone hazardous waste disposal sites
SO - Ground Water Monit. Rev.; VOL 1, ISS 3, 1981,47-54
PT - JOURNAL ARTICLE
CY - USA
LA - ENG
CD - GWMRD
IS - 0277-1926
AB - CBAC COPYRIGHT: CHEM ABS ADDENDUM Groundwater monitoring technol wastewater disposal;Pipes and Tubes Steel, in monitoring of groundwater in waste disposal sites of arid zone;Sampling apparatus In groundwater monitoring in waste disposal sites of arid zone;Wastewater treatment Evapn. pond, buried electrode system for monitoring of leakage from, in arid zone
RN - 112-95-8; 124-07-2; 5911-04-6; 7732-18-5; 9002-86-2; 9003-56-9; 73789-15-8; 80297-58-1; 80297-59-2
EM - 8405

277 SI - CA/096/057807E
CC - CA/163007
AU - Dudley BJ ; Williams JL
TI - Nonthrombogenic articles
SO - U.S. PATENT NO. 4302368 11/24/81 (Becton, Dickinson and Co.)
PT - PATENT
CY - USA
LA - ENG
AB - CBAC COPYRIGHT: CHEM ABS ADDENDUM Materials having reduced thrombogenicity and which are useful for purposes requiring their contact with whole blood consist of polymeric resins, and ammonium compds, RR1NH2+ A- (where R = C12-18 alkyl, R1 = C1-6 alkyl and A = anion of a sol. heparin salt). These materials show excellent blood compatibility without exhibiting the toxicity assocd. with the polymers which are treated with quaternary ammonium compds. and heparin. A tube fabricated from polyethylene 70 and Bi oxychloride 30% (by wt.) was treated by steeping it in and aq. dispersion of dodecylmethylammonium chloride for 16 h at 65.degree.. The tube was cooled, washed and dried and then immersed in an aq. soln. of Na heparinate (1% by wt.) for 16 h at 65.degree.. This was then crosslinked with glutaraldehyde for 4 h and washed and dried at 50.degree.. This polymer tube was nontoxic at the desired blood compatibility level.
RN - 2292-50-4; 2787-53-3; 9002-84-0; 9002-86-2; 9002-88-4; 9002-89-5; 9003-07-0; 9003-39-8; 9003-53-6; 9005-49-6; 32509-42-5; 80648-70-0; 80648-71-1; 80648-72-2; 80648-73-3
EM - 8405

278 SI - CA/096/016090X
CC - CA/105004
AU - Kochmann W ; Lafrenz M ; Lange E ; Moeller FW ; Naumann J
AU - Pfeiffer HD ; Thust U ; Trautner K ; Wigert H ; Ziegler K
TI - Agent for controlling undesirable organisms in waters
SO - Ger. (East) PATENT NO. 149302 07/08/81 (VEB Chemiekombinat Bitterfeld)
PT - PATENT
CY - Ger. Dem. Rep.
LA - GER
AB - CBAC COPYRIGHT: CHEM ABS ADDENDUM Slow-release aquatic molluscicidal, algicidal, fungicidal, and bactericidal formulations are prepd. by incorporating a known pesticide into PVC [9002-86-2] or PVC copolymer, together with a PVC-sol. compd., such as a plasticizer, and a water-sol. compd., such as an inorg. salt. Thus, a compn. is given, contg. tributyltin oxide [56-35-9] 5, PVC 100, di-Bu phthalate 20, and NaCl 20 parts by wt. In water, the compn. showed fast initial release of the active ingredient, followed by slow , prolonged release for .ltoreq.380 days. In an aquarium expt., the compn. controlled the snail Biomphalaria glabrata, with no damage to fish (Lebistes reticulatus) and plants (Elodea and Potamogeton).
RN - 56-35-9; 70-30-4; 122-34-9; 137-26-8; 147-84-2; 3380-34-5;

4342-30-7; 4342-36-3; 7647-14-5; 9002-86-2; 10043-52-4; 19883-10-4
EM - 8405

279 SI - CA/099/058188C
CC - CA/159006
AU - Puzderliski A
TI - Stability of lewisite drops on the surfaces of different materials
SO - Naucno-Teh. Pregl.; VOL 31, ISS 9, 1981,45-8
PT - JOURNAL ARTICLE
CY - Yugoslavia
LA - SCR
CD - NPGLA
AB - CBAC COPYRIGHT: CHEM ABS Lewisite mixt stability substrate safety;Asphalt Lewisite mixt. drop stability on;Bricks Lewisite mixt. drop stability on;Concrete Lewisite mixt. drop stability on;Leather Lewisite mixt. drop stability on Calfskin;Rubber Lewisite mixt. drop stability on Butyl;Safety Lewisite drop stability in relation to, substrate effect on;Sand Lewisite mixt. drop stability on;Soils Lewisite mixt. drop stability on;Wood Lewisite mixt. drop stability on;Wool Lewisite mixt. drop stability on
RN - 541-25-3; 7784-34-1; 9002-86-2; 9002-88-4; 40334-69-8
EM - 8309

280 SI - CA/099/010081K
CC - CA/159002
AU - Himi Y
AD - Kanagawa Prefect. Environ. Cent., Kanagawaken
TI - The emissions of heavy metals into the atmosphere during municipal solid waste incineration
SO - Kanagawa-ken Taiki Osen Chosa Kenkyu Hokoku; VOL 23,, 1981,236-40
PT - JOURNAL ARTICLE
CY - Japan
LA - JPN
CD - KTOHD
AB - CBAC COPYRIGHT: CHEM ABS Incinerator municipal metal pollution;Air pollution By metals, from municipal incinerator, refuse compn. in relation to;Flue gases Municipal, metals in, refuse compn. in relation to Incinerator;Incinerators For municipal refuse, metal emission from, refuse compn. in relation to;Metals Air pollution by, from municipal incinerators, refuse compn. in relation to Heavy;Waste solids Incineration of, metal emissions from, refuse compn. in relation to Municipal refuse
RN - 7439-92-1; 7439-97-6; 7440-31-5; 7440-43-9; 7440-66-6; 9002-86-2
EM - 8308

281 SI - CA/098/214287W
CC - CA/117005
AU - Vergnaud JM ; Messadi D ; Taverdet JL
AD - U.E.R. Sci., Univ. Saint-Etienne, Saint-Etienne
TI - Plasticizer migration from plasticized PVC into liquids
SO - Org. Coat. Plast. Chem.; VOL 45,, 1981,41-5
PT - JOURNAL ARTICLE
CY - Fr.
ZP - 42100
LA - ENG
CD - OCPCD
IS - 0161-214X
AB - CBAC COPYRIGHT: CHEM ABS PVC plasticizer migration food Dioctyl phthalate migration food PVC;Food Plasticizer migration from PVC in models of
RN - 117-81-7; 9002-86-2
EM - 8307

282 SI - CA/098/185546X
CC - CA/163008
AU - Andreeva IS ; Zemtsova LV ; Kuksanov NK
AD - Inst. Tsitol. Genet., Novosibirsk
TI - Radiation sterilization of immobilized enzymes
SO - Immobilizovannye Proteoliticheskie Fermenty Lech. Gnoino-Nekroticheskikh Protsessov; 1981,111-18
PT - MONOGRAPH
CY - USSR
LA - RUS
CD - 49KQA
AB - CBAC COPYRIGHT: CHEM ABS The optimum dose of gamma-radiation for sterilization of enzymic prepns. Trypsillin (trypsin [9002-07-7] immobilized on CM-cellulose), Profezym (Bacillus subtilis protease [9001-92-7] immobilized on AE-cellulose), enzyme-immobilized polymeric blood vessel catheters, and films with immobilized trypsin was 2.5 Mrad. The redn. of the proteolytic activity of the enzymes by radiation was insignificant and varied within 1.5%. Increasing the dose (4-6 Mrad) inactivates the enzymes substantially, and a dose <2.5 Mrad did not result in complete sterilization.
RN - 9001-92-7; 9002-07-7; 9002-86-2; 9002-88-4; 9004-32-4; 9032-36-4
EM - 8306

283 SI - CA/098/131561E
CC - CA/159005
AU - Bergamaschi A ; Carelli G ; Magnavita N ; Vinci F ; Vincenti A
AD - Ist. Med. Lavoro, Univ. Cattol., Rome
TI - Saturnism risk in the poly(vinyl chloride) processing industry
SO - Ann. Ist. Super. Sanita; VOL 17, ISS 3, 1981,495-500
PT - JOURNAL ARTICLE
CY - Italy
LA - ITA
CD - AISSA

IS - 0021-2571
AB - CBAC COPYRIGHT: CHEM ABS PVC processing health hazard lead;Air pollution By lead, in polyvinylchloride manuf., health hazards of;Health hazard Of lead exposure in polyvinylchloride processing Occupational
RN - 7439-92-1; 9002-86-2
EM - 8305

284 SI - CA/098/024315F
CC - CA/171011
AU - Stojanik B ; Lieser KH
AD - Fachber. Anorg. Chem. Kernchem., Tech. Hochsch. Darmstadt, Darmstadt
TI - Dissolution of plutonium oxide during wet ashing of medium-level wastes
SO - Nukl. Entsorgung; VOL 1,, 1981,295-308
PT - JOURNAL ARTICLE
CY - Fed. Rep. Ger.
ZP - D-6100
LA - GER
CD - NUKED
AB - CBAC COPYRIGHT: CHEM ABS Dissoln plutonium oxide wet ashing Wet ashing medium level waste Radioactive waste wet ashing Reactor fuel waste wet ashing;Nuclear reactor fuel reprocessing Dissoln. of plutonium oxide during wet ashing in relation to;Radioactive wastes Dissoln. of plutonium oxide during wet ashing of Medium-level;Rubber Wet ashing of medium-level wastes contg., plutonium oxide dissoln. in relation to Neoprene
RN - 1344-57-6; 7429-90-5; 7439-89-6; 7440-66-6; 7664-93-9; 9002-86-2; 9002-88-4; 12059-95-9
EM - 8302

285 SI - CA/097/187340D
CC - CA/159001
AU - Usmani AM
AD - Res. Inst., Univ. Dayton, Dayton
TI - Plastic, rubber, and PVC processing emissions
SO - Org. Coat. Plast. Chem.; VOL 44,, 1981,357-63
PT - JOURNAL ARTICLE
CY - USA
ZP - 45469
LA - ENG
CD - OCPCD
IS - 0161-214X
AB - CBAC COPYRIGHT: CHEM ABS Chem emission plastic rubber processing Rubber processing chem emission detn Polyvinyl chloride processing emission detn Plastic processing chem emission detn;Air analysis Chem. emission detn. by, in workplace, during processing of plastics and poly(vinyl chloride) and rubber, methods for;Plastics Processing of, emissions from, detn. of, methods for;Rubber Processing of, emissions from, detn. of, methods for Synthetic;Waste gases Pollutant detn. in, emission detn. by, in processing of plastics and rubber

RN - 9002-86-2
EM - 8212

286 SI - CA/097/157675Z
CC - CA/104004
AU - Sharom MS ; Solomon KR
AD - Univ. Guelph, Guelph
TI - Adsorption and desorption of permethrin and other pesticides on glass and plastic materials used in bioassay procedures
SO - Can. Tech. Rep. Fish. Aquat. Sci.; VOL 990,, 1981,340-4
PT - JOURNAL ARTICLE
CY - Can.
LA - ENG
CD - CTRSD
AB - CBAC COPYRIGHT: CHEM ABS The adsorption and desorption of permethrin (I) [52645-53-1] on glass and several plastic materials that may be used for the construction of limnocorrals were investigated. I was substantially adsorbed on polyethylene [9002-88-4] and polyvinyl chloride [9002-86-2], but not on glass and teflon [9002-84-0]. Adsorbed I was not easily desorbed from polyethylene and polyvinyl chloride by several water rinses. Increased adsorption of I was obsd. with increasing temps. A study on the adsorption of several herbicides of various water solys. indicated that trifluralin [1582-09-8] was adsorbed to glass and that there was no general relation between adsorption of the herbicide on polyvinyl chloride and water soly. It is important to det. the role of pesticide adsorption (on bioassay containers) on the overall disappearance of the chem. in aquatic systems or its toxicity to aquatic organisms.
RN - 1582-09-8; 9002-84-0; 9002-86-2; 9002-88-4; 52645-53-1
EM - 8211

287 SI - CA/097/171021Q
CC - CA/171010
AU - Steinhaeusler F ; Pohl-Rueling J ; Pohl E
AD - Div. Biophys., Univ. Salzburg, Salzburg
TI - Control of radon daughter concentration in mine atmospheres with the use of radon diffusion barriers
SO - Radiat. Hazards Min.: Control, Meas., Med. Aspects, Int. Conf.; 1981,127-30
PT - MONOGRAPH
CY - Austria
LA - ENG
CD - 48DGA
AB - CBAC COPYRIGHT: CHEM ABS Radon diffusion barrier mine Polyamide radon barrier Health physics mine Safety radon barrier mine;Diffusion Of radon and its decay products, in mines, polyamide as barrier for;Health physics In mines, radon diffusion barrier in;Mines and Mining Radon diffusion barrier in, polyamide for;Polyamides As diffusion barrier, for radon, in mine;Rocks Radon emanation from, in mine, diffusion barrier for;Rubber As diffusion barrier, for radon, in mine Synthetic
RN - 9002-86-2; 9002-88-4; 10043-92-2

EM - 8211

288 SI - CA/097/168356X
CC - CA/160005
AU - Haxo HE Jr
AD - Matrecon Inc., Oakland
TI - Testing of materials for use in the lining of waste disposal facilities
SO - ASTM Spec. Tech. Publ.; VOL 760, ISS Hazard. Solid Waste Test., 1981,269-92
PT - JOURNAL ARTICLE
CY - USA
ZP - 94623
LA - ENG
CD - ASTTA
IS - 0066-0558
AB - CBAC COPYRIGHT: CHEM ABS Lining testing waste disposal facility Clay soil liming waste disposal Asphalt concrete lining waste disposal Polymer liming waste disposal;Alkanes Linings, testing of, for waste disposal facilities;Asphalt Linings from, testing of, for waste disposal facilities;Bentonite Linings from, testing of, for waste disposal facilities;Bitumens Lining sealants, testing of, for waste disposal facilities;Cement Linings from, testing of, for waste disposal facilities;Clays Linings from, testing of, for waste disposal facilities;Linings For waste disposal facilities;Polyesters Linings from, testing of, for waste disposal facilities;Polymers Linings from, testing of, for waste disposal facilities;Rubber Linings, testing of, for waste disposal facilities Ethylene-propene;Rubber Linings, testing of, for waste disposal facilities Neoprene;Rubber Linings, testing of, for waste disposal facilities Butyl;Soils Linings from, testing of, for waste disposal facilities;Urethane polymers Linings from, testing of, for waste disposal facilities;Waste solids Linings for retention of leachate from, testing of, for disposal facilities;Wastes Linings for retention of, testing of, for disposal facilities;Wastewater Linings for retention of, testing of, for disposal facilities;Water pollution By wastes and leachates from waste solids, lining for waste facilities for control of
RN - 9002-86-2; 9002-88-4; 9003-29-6
EM - 8211

289 SI - CA/097/098319M
CC - CA/163007
AU - Mizutani Y
AD - Fac. Dent., Tokyo Med. Dent. Univ., Tokyo
TI - Biocompatibility of medical synthetic polymers utilized in maxillofacial surgery. Evaluation of cytotoxicity to cultured cell and elution tendency of polymer elements
SO - Kokubyo Gakkai Zasshi; VOL 48, ISS 4, 1981,415-38
PT - JOURNAL ARTICLE
CY - Japan
ZP - 113

LA - JPN
CD - KOGZA
IS - 0300-9149
AB - CBAC COPYRIGHT: CHEM ABS The biocompatibility of polymers used for maxillofacial surgery was tested using com. thermosetting elastomers: Realastic (I), poly(vinyl chloride) [9002-86-2]; Epithane-3 (II) and System HC-107/ON-105 (III), and Silastic MDX4-4210 (IV). From L-cell count change after culturing with the ext. of a cited amt. of elastomers, I and IV were cytostatic at 1-10 mg/mL and 10-100 mg/mL, resp., II was cytostatic at 1 mg/mL and cytocidal at 3.2-10 mg/mL, and IV was noncytotoxic at 10-100 mg/mL. By morphol. observation under a contrast microscope, I and II were cytostatic at 1-3.2 mg/mL and 1 mg/mL, resp., and cytocidal at 10 mg/mL and 3.2-10 mg/mL, resp., III was cytostatic at 10-100 mg/mL, and IV was noncytotoxic at 10-100 mg/mL. DNA, RNA and protein syntheses rates were detd. by radioactivity incorporation rate using 3H-thymidine, 3H-uridine, and 3H-Leu. I inhibited DNA and protein, and moderately inhibited RNA synthesis, either II or III inhibited all of these syntheses, and IV moderately inhibited DNA and RNA and accelerated protein synthesis. Elution tendency was evaluated by repeated extns. during 24 h using a medium contg. 10% serum, followed by measurement of the decrease in the DNA synthesis inhibition of the L-cell: I 100%, II 86%, III 36%, and IV 76%.
RN - 9002-86-2
EM - 8210

290 SI - CA/097/114602F
CC - CA/159005
AU - Tharr DG
AD - Hazard Evaluations Tech. Assist. Branch, Natl. Inst. Occup. Saf. and Health, Cincinnati
TI - Health hazard evaluation report No. HETA-81-403-1024, roofing site, Miami, Florida
SO - Report; ISS HETA-81-403-1024; Order No. PB82-182742,, 1981,9 pp.
PT - TECHNICAL REPORT
CY - USA
LA - ENG
CD - D8REP
AB - CBAC COPYRIGHT: CHEM ABS Occupational health hazard roofer Hydrochloric acid occupational health hazard;Adhesives Air pollution by, occupational exposure to, health hazards of, to roofers;Air pollution By hydrochloric acid, occupational exposured to, health hazard of, to roofers;Roofing Occupational health hazard to roofers in;Solvents Air pollution by, occupational exposure to, health hazards of, to roofers
RN - 7647-01-0; 9002-86-2
EM - 8210

291 SI - CA/097/114441C
CC - CA/159001
AU - Prokhorova EK ; Boyarskaya VL ; Kalinin VE ; Blinov VN
TI - Determination of C1-4 alcohols in the air of the working zone in the presence of laser radiation on poly(vinyl chloride) materials
SO - Povysh. Effekt. Tekhn. Sredstv Okhrany Truda, M.; 1981,122-5
PT - JOURNAL ARTICLE
CY - USSR
LA - RUS
CD - D3RAP
AB - CBAC COPYRIGHT: CHEM ABS Alc detn air PVC irradn Laser radiation PVC alc detn;Air analysis Alc. detn. in, in laser radiation action on PVC;Alcohols Detn. of, in air of working zone of laser radiation action on PVC C1-4;Laser radiation PVC irradn. by, alc. detn. in air of working zone of
RN - 9002-86-2
EM - 8210

292 SI - CA/097/097570Z
CC - CA/159004
AU - Alanova TG ; Mikheeva TY ; Abramova IV
TI - Catalytic cleaning of waste gases from poly(vinyl chloride) production and tablecloths made of poly(vinyl chloride)
SO - Katalit. Ochistka Otkhodyashch. Gazov Prom. Predpriyatii i Vykhlop. Gazov Avtotransp. Materialy 3-i ; ISS Ch. 1, 1981,173-6
PT - JOURNAL ARTICLE
CY - USSR
LA - RUS
CD - D3RAP
AB - CBAC COPYRIGHT: CHEM ABS PVC waste gas catalytic treatment Tablecloth PVC emission catalytic treatment;Catalysts and Catalysis Of waste gas, from PVC manufg. and PVC tablecloths;Vinyon fibers Tablecloths, waste gas from, catalytic treatment of;Waste gases Catalytic treatment of, from PVC manufg. and PVC tablecloths
RN - 9002-86-2
EM - 8210

293 SI - CA/097/028552H
CC - CA/163007
AU - Tyutyukina LS ; Khokhlova TA ; Mel'nikova GD ; Nikitina LS
AU - Fedotov BG ; Valiullina VA ; Chernokal'skii BD
AD - Ivanov. Nauchno-Issled. Inst. Plenochn. Pokrytii Iskusstven. Kozhi. Tekh. Naznachen., Ivanovo
TI - Use of organoarsenic compounds for the disinfection of polymer materials
SO - Khim. Tekhnol. Elementoorg. Soedin. Polim.; 1981,49-53
PT - JOURNAL ARTICLE
CY - USSR
LA - RUS
CD - KTESB
AB - CBAC COPYRIGHT: CHEM ABS A no. of organoarsenic compds. were

examd. for their antifungal properties in model PVC [9002-86-2] compns. contg. plasticizers, stabilizers, fillers, and pigments. 10,10'-bis(phenoxyarsine) oxide [58-36-6], 10-chlorophenoxarsine [2865-70-5], 10-ethylphenoxarsine [5437-44-5], And 10-fluoro-5,10-dihydrophenarsazine [779-04-4] are fungicidal in their free forms. The 1st 2 compds. assure the fungal resistance of the polymer compn. at 0.02 wt.%, whereas the latter 2 were active at 0.2 wt.%. UV irradn. of these polymeric samples contg. organoarsenic compds. changed the compn. and fungicidal properties insignificantly. In related expts. fungicidal, toxic, and physicomech. properties of Estabex ABF were compared to those of its modified analog. The toxicity of the analog was much lower. Also, UV irradn. does not alter the physicomech. properties of the polymer materials. The Estabex ABF analog may be used in artificial skin prepns.

RN - 58-36-6; 779-04-4; 2865-70-5; 2896-10-8; 5437-44-5; 9002-86-2; 26037-41-2; 82187-65-3
EM - 8208

294 SI - CA/097/043656P
CC - CA/160001
AU - Boulenger P ; Audoin L ; Lambert S ; Llauro D ; Marechal D
AU - Gros D
AD - Serv. Technol. Environ., Inst. Rech. Chim. Appl.
TI - Use of bacterial beds in water treatment reactor lining. New formulation
SO - Eau Ind.; VOL 54,, 1981,39-46
PT - JOURNAL ARTICLE
CY - Fr.
LA - FRE
CD - EINSD
IS - 0337-9329
AB - CBAC COPYRIGHT: CHEM ABS Biofiltration plastic lining wastewater treatment Polyvinyl chloride biofilter lining wastewater Polyethylene biofilter lining wastewater treatment Dairy wastewater biofiltration plastic lining;Dairy industry Wastewater from, biofiltration. of, plastic linings for;Wastewater treatment Plastic linings for, surface load effects on Biol. filtration.
RN - 9002-86-2; 9002-88-4
EM - 8208

295 SI - CA/096/223226M
CC - CA/163008
AU - Illum L ; Bundgaard H
AD - Dep. Pharm. Chem. AD, R. Dan. Sch. Pharm., Copenhagen
TI - Sorption of drugs by plastic infusion bags
SO - J. Pharm. Pharmacol.; VOL 33, ISS Suppl., 1981,102P
PT - JOURNAL ARTICLE
CY - Den.
ZP - DK-2100
LA - ENG
CD - JPPMA

IS - 0022-3573
AB - CBAC COPYRIGHT: CHEM ABS Sorption isotherms for of warfarin Na [129-06-6], various benzodiazepines, and other drugs and chems. from aq. soln. by PVC [9002-86-2] infusion bags over 7 days at 22.degree. were of the const. partition types. For warfarin Na, the plastic could be satd. by the drug at high soln. concns. For the benzodiazepines there was a relation between the initial rate of absorption and the n-hexane/water partition coeffs. of the drugs. The 'diffusion', rather than the 'closed 2 compartment kinetic' model gave the better fit for the kinetics of uptake. The increased loss from soln. of warfarin Na with decreased pH showed that the nonionized form of the drug was the partition species. Sorption of the compds. by infusion bags of polyethylene [9002-88-4] and polypropylene [9003-07-0] was much reduced compared with that by PVC bags.
RN - 129-06-6; 146-22-5; 439-14-5; 604-75-1; 2898-12-6; 9002-86-2; 9002-88-4; 9003-07-0; 12794-10-4
EM - 8207

296 SI - CA/096/223152J
CC - CA/163005
AU - Fessi H ; Carstensen JT ; Puisieux F ; Marty JP
AD - Lab. Pharm. Galenique, Fac. Pharm. Paris-Sud, Chatenay Malabry
TI - Plastic matrix-type sustained-release formulations: physical study of compression
SO - Int. Conf. Pharm. Technol. Prod. Manuf., [Pap.]; 1981,Paper No. 13, 22 pp.
PT - MONOGRAPH
CY - Fr.
ZP - 92290
LA - FRE
CD - 47SVA
AB - CBAC COPYRIGHT: CHEM ABS The effect of compression on polymer, e.g. PVC [9002-86-2], poly(vinyl acetate) [9003-20-7], and vinyl acetate-vinyl chloride copolymer [9003-22-9], matrixes for sustained-release pharmaceuticals was studied with the matrix alone or in the presence of excipients and lubricants. The T. Higuchi relation (1954) concerning applied lubrication, but with an ordinate of origin which might be different from zero, accounts for the rearrangement of particles in the compression chamber. The polymers may deform with rupture of the particles but are not subject to plastic deformation. Treatment of variations in energy as a function of the compression force applied allowed detn. of the force necessary to achieve rearrangement of the particles.
RN - 9002-86-2; 9003-20-7; 9003-22-9
EM - 8207

297 SI - CA/096/212499B
CC - CA/105004
AU - Sanders CJ
AD - Great Lakes Forest Res. Cent., Can. For. Serv., Sault Ste. Marie
TI - Release rates and attraction of PVC lures containing synthetic sex attractant of the spruce budworm, Choristoneura fumiferana (Lepidoptera: Tortricidae)
SO - Can. Entomol.; VOL 113, ISS 2, 1981,103-11
PT - JOURNAL ARTICLE
CY - Can.
ZP - P6A 5M7
LA - ENG
CD - CAENA
IS - 0008-347X
AB - CBAC COPYRIGHT: CHEM ABS Release rates of synthetic attractant compn. contg. (E)-11-tetradecenal [35746-21-5] and (Z)-11-tetradecenal [35746-21-5] of the spruce budworm, C. fumiferana, from a PVC [9002-86-2] formulation were detd. by wt. loss. They varied in direct proportion to the initial concn. of the attractant and also with the size of the pellet. Release rates declined by .apprx.50% over 10-40 days and 40-100 days. Initially they were 2 to 3 times lower at 10.degree. than at 21.degree., but were far more const. over time at the lower temp. A 130 mg pellet contg. 42 mug attractant released an estd. 1-1 mug/day, or 40-40 ng/h, which is close to the rate of emission by a calling female, and field trapping data showed that a lure this size attracted the same no. of males as a calling female.
RN - 9002-86-2; 35746-21-5
EM - 8207

298 SI - CA/096/204568H
CC - CA/159001
AU - Michal J
AD - Ore Res. Inst., Prague
TI - Determination of carbon monoxide in thermal degradation products of polymeric materials
SO - Fire Mater.; VOL 5, ISS 4, 1981,149-52
PT - JOURNAL ARTICLE
CY - Czech.
ZP - 147 13
LA - ENG
CD - FMATD
IS - 0308-0501
AB - CBAC COPYRIGHT: CHEM ABS Carbon monoxide polymer thermal degrdn;Leather substitutes Polyurethane-coated textile, thermal degrdn. products of, carbon monoxide detn. in, temp. effect on Poromeric;Polyamides Thermal degrdn. products of, carbon monoxide detn. in;Polycarbonates Thermal degrdn. products of, carbon monoxide detn. in;Urethane polymers Cellular, thermal degrdn. products of, carbon monoxide detn. in, temp. effect on
RN - 630-08-0; 9002-86-2; 9002-88-4; 9003-07-0; 9003-53-6; 9003-56-9; 9011-14-7; 25035-04-5; 51280-99-0; 81690-26-8

- 8207

- CA/096/168488W
- CA/161010
- Becker-Birck J ; Dellenbusch A ; Havemeister G
- Abt. Hyg. Sozialhyg. Gesundheitswes., Christian-Albrechts-Univ., Kiel
- Hygienic assessment of plastic swimming pool water covers
- Zentralbl. Bakteriol., Mikrobiol. Hyg., Abt. 1, Orig. B; VOL 174, ISS 5, 1981,443-52
- JOURNAL ARTICLE
- Fed. Rep. Ger.
- GER
- ZAOMD
- CBAC COPYRIGHT: CHEM ABS Plastic pool cover water quality PVC pool cover water quality Polyethylene pool cover water quality Chlorine consumption plastic pool cover Bacteriol water plastic pool cover;Chlorides Water pollution by, in swimming pools, plastic pool covers in relation to;Nitrates Water pollution by, in swimming pools, plastic pool covers in relation to;Nitrites Water pollution by, in swimming pools, plastic pool covers in relation to;Phosphates Water pollution by, in swimming pools, plastic pool covers in relation to;Plastics In swimming pool ' 'ers, bacteriol. and chem effects on water from;Pseudomonas .orescens Growth of, in swimming pool water, plastic pool covers in relation to;Swimming pools Polyethylene and PVC plastic covers for, bacteriol. and chem. effects from
- 7440-44-0; 9002-86-2; 9002-88-4; 14798-03-9
- 8207

- CA/096/168073G
- CA/160004
- Wilson DC ; Young PJ ; Hudson BC ; Baldwin G
- Waste Res. Unit, Harwell Lab., Harwell
- Pigmented plastics in a municipal landfill site. Is this a significant source of cadmium pollution?
- Chem. Ind. (London); ISS 23, 1981,843-4
- JOURNAL ARTICLE
- UK
- OX11 0RA
- ENG
- CHINA
- 0009-3068
- CBAC COPYRIGHT: CHEM ABS Cadmium leaching waste plastic PVC waste cadmium leaching ABS waste cadmium leaching Pigment cadmium leaching waste Municipal landfill cadmium leaching;Plastics Waste, cadmium leaching from pigmented, in landfill sites;Waste solids Pigmented, cadmium leaching from, in landfill sites Plastics
- 7440-43-9; 9002-86-2; 9003-56-9
- 8207

* * END OF OFFLINE PRINT * * * * *