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Literature Reference Bulletin

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Page 1 of 9 pages

AEROSOLS

0071 van Ketel, W.G., Allergic contact dermatitis from propellants in deodorant sprays in combination with allergy to ethyl chloride. Contact Dermatitis, Vol. 2, No. 2, 1976, pp. 115-119.

Three cases of allergic contact eczema from the use of deodorant sprays are described in which sensitization appears to be due to the propellant. All patients reacted positive to chlorofluorocarbon 11, but only one of the patients reacted to chlorofluorocarbon 12. Reactions were also noted to ethyl chloride which was used during a punch biopsy.

M.M. Rieger

ALCOHOL

(See Ref. No. 0087) methyl alcohol

BENZOCAINE

(See Ref. No. 0086) Lanolin alcohol

BIOTIN

(See Ref. No. 0096) testosterone

2-BROMO-2-NITROPROPANE-1,3-DIOL

0072 Moore, D.H., Chasseaud, L.F., Risdall, P.C., and Crampton, E.L., The metabolism of the antibacterial agent bronopol (2-bromo-2-nitropropane-1,3-diol) given orally to rats and dogs. Food Cosmet Toxicol, Vol. 14, No. 3, Jun, 1976, pp. 183-187.

After administration of oral doses of [^{14}C]bronopol (2-bromo-2-nitropropane-1,3-diol), the radioactivity was readily absorbed, evenly distributed in tissues and rapidly excreted by rats and dogs. The major urinary metabolite of bronopol was identified as 2-nitropropane-1,3-diol formed by reductive dehalogenation, possibly by reaction of bronopol with endogenous thiol-containing compounds. Four others more polar but unidentified metabolites were detected.

Bonnie Goeser

0073 Moore, D.H., Chasseaud, L.F., Bucke, D., and Risdall, P.C., The percutaneous absorption and disposition of the antibacterial agent bronopol in rats and rabbits. Food Cosmet Toxicol, Vol. 14, No. 3, Jun, 1976, pp. 189-192.

Only small amounts of [^{14}C]bronopol (2-bromo-2-nitropropane-1,3-diol) were absorbed by rats and rabbits after cutaneous application, despite the use of occlusive

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dressings to enhance percutaneous absorption. Excretion of absorbed radioactivity occurred mainly in the urine and expired air.

Bonnie Goeser

BRONOPOL

(See 2-Bromo-2-Nitropropane-1,3-Diol)

BUTANOL

(See n-Butyl Alcohol)

N-BUTYL ALCOHOL

(See Ref. No. 0087) methyl alcohol

CAFFEINE

0074 Borger, H.W., et al., Influence of coffee and caffeine on gastrin and acid secretion in man. Dtsch Med Wochenschr, Vol. 101, Mar 19, 1976, pp. 455-457.

Gastric secretion was stimulated substantially in humans following the intragastric instillation of coffee, decaffeinated coffee, and pure caffeine. The basal serum gastrin concn was unchanged after intragastric caffeine but increased substantially after instillation of coffee and decaffeinated coffee. Roasted products seem to be the cause of the gastrin-releasing effect of coffee.

CHLOROFLUOROCARBON 11

(See Ref. No. 0071) fluorides

CHLOROFLUOROCARBON 12

(See Ref. No. 0071) fluorides

CINNAMAL

(See Ref. No. 0075)

CINNAMIC ALDEHYDE

(See Cinnamal)

CINNAMON

(See Ref. No. 0075)

CINNAMON OIL

0075 Calnan, C.D., Cinnamon dermatitis from an ointment. Contact Dermatitis, Vol. 2, No. 3, 1976, pp. 167-170.

Six patients are described who exhibited allergic contact dermatitis to a proprietary antis ptic ointment containing oil of cinnamon (cinnamon oil). Two of these patients and one other individual exhibited a positive patch test to cinnamic aldehyde (cinnamal).

M.M. Rieger

COLLAGEN

0076 Tronnier, H., The dermatological efficacy of a collagen ointment. Ärztl Kosmetologie, Vol. 6, 1976, pp. 93-95. (German)

A total of 117 patients suffering from various skin ailments were treated with an ointment containing 0.06% of soluble native collagen. The best therapeutic results were obtained with keloids, scars, and circumscribed sclerodermia. The least satisfactory effects were observed in cases of kraurosis and senile or cortisone-caused skin atrophy. The rapid disappearance of pruritus was noteworthy. Physical measurements on skin *in vivo* also revealed a beneficial effect.

M.M. Rieger

D&C YELLOW NO. 11

0077 Calnan, C.D., Quinazoline Yellow SS in cosmetics. Contact Dermatitis, Vol. 2, No. 3, 1976, pp. 160-166.

Patch tests were used to confirm that Quinazoline Yellow SS (D&C Yellow No. 11: Color Index number 47000) caused allergic contact dermatitis in five subjects who had used a lipstick or a rouge stick containing this dye.

M.M. Rieger

DEODORIZED KEROSENE

0078 Carpenter, C.P., Geary, D.L., Jr., Myers, R.C., Nachreiner, D.J., Sullivan, L.J., and King, J.M., Petroleum hydrocarbon toxicity studies. XI. Animal and human response to vapors of deodorized kerosene. Toxicol Appl Pharmacol, Vol. 36, No. 3, Jun, 1976, pp. 443-456.

The suggested hygienic standard for human inhalation of deodorized kerosene, based upon the results of inhalation studies with rats and dogs and the sensory responses of human subjects is 0.10 mg/l. (14 ppm). Air saturated at 25°C with these vapors produced no signs of discomfort, nor any mortality in rats, dogs, or cats during 8-hr inhalation periods. Aerosols caused only skin irritation of extremities of rats after 6 hr/day for 4 days at a mean concn of 7.5 mg/l. Cats were not affected by 6.5 mg/l. after 6 hr in a similarly generated aerosol. Air at 25°C substantially saturated with the vapors caused no statistically significant deviations from control groups in any of the monitored criteria of effect when inhaled 6 hr/day, 5 days/wk, for 67 and 68 days by rats and dogs, respectively. The most probable odor threshold as determined by a sniff test conducted with 6 human subjects is 0.0006 mg/l. (0.09 ppm). Substantially saturated vapor at room temperature *ca.* 0.10 mg/l. (14ppm) should be well-tolerated in the workroom atmosphere for continuous 8 hr/day inhalation.

DICHLOROPHENE

(See Ref. No. 0082) Hexachlorophene

ETHANOL

(See Alcohol)

FD&C RED NO. 2

0079 Arnold, D.W., Kennedy, G.L., Keplinger, M.I., and Calandra, J.C., Failure of FD&C Red No. 2 to produce dominant lethal effects in the mouse. Food Cosmet Toxicol, Vol. 14, No. 3, Jun, 1976, pp. 163-165.

Groups of 12 male albino mice were given a single ip injection of either 250 or 500 mg FD&C Red No. 2/kg body weight. Each male was subsequently mated with three females each wk for six consecutive wks. Genetic damage, indicated by an increase in dominant lethal mutations observed *in utero*, was not produced.

Bonnie Goeser

FD&C YELLOW NO. 5

0080 Settipane, G.A., et al., Significance of tartrazine sensitivity in chronic urticaria of unknown etiology. J Allergy Clin Immunol, Vol. 57, No. 6, Jun, 1976, pp. 541-546.

In a double-blind crossover challenge with 0.22 mg of tartrazine (FD&C Yellow No. 5) and a control, FD&C Yellow No. 5 sensitivity was found in 3 of 38 patients with chronic urticaria. Of the 38 patients, 10 were known to have a history of aspirin intolerance which was caused by FD&C Yellow No. 5.

FORMALDEHYDE

(See Ref. No. 0086) benzyl alcohol -

HEXACHLOROPHENE

0081 Bjondahl, K., and Isomaa, B., The distribution and excretion of hexachlorophene in rats of different ages. Food Cosmet Toxicol, Vol. 14, No. 3, Jun, 1976, pp. 179-182.

The distribution and excretion of orally administered [^{14}C]hexachlorophene ([^{14}C]HCP) was studied in male rats aged 20, 32, and 85 days. The concn of radioactivity in the serum, liver, kidneys and brain was significantly higher in the 20-day-old group than in the two other groups during the first 4 days after [^{14}C]HCP administration. Most of the administered radioactivity was excreted in feces during the first 4 days after administration. There were no significant differences between the different groups in the proportion of administered radioactivity excreted and no metabolites of [^{14}C]HCP were found by thin-layer chromatography of fecal extracts.

Bonnie Goeser

0082 Clayton, R., From fentichlor sensitivity to actinic reticuloid. Proc R Soc Med, Vol. 69, No. 5, May, 1976, p. 379.

A case report of a male industrial chemist, aged 48, with a history of exposure to fentichlor (a halogenated phenolic compound) who showed positive patch tests to fentichlor following an outbreak of rash on the face and scalp. Later on, handling of paper impregnated with hexachlorophene and dichlorophene caused a flare up of rash. Also with exposure to sun and fluorescent light the rash reappeared and photopatch tests were positive to fentichlor and dichlorophene. The author concluded that the persistant light reaction without further exposure was due to protein-bound fentichlor which remained photochemically active. Such a reaction has already been reported with tetrachlorsalicylanilide.

M.M. Dolan

0083 McCarl, G.W., In support of hexachlorophene. (Letters to the Editor). Arch Dermatol, Vol. 112, No. 7, Jul, 1976, pp. 1031-1033.

The author responds to the report by Catalano (Lit. Ref. Bulletin 75-2, 0141), which labels hexachlorophene as a dangerous substance. Evidence supporting the continued use of hexachlorophene under certain conditions is presented.

0084 Plueckhahn, V.D., and Collins, R.B., Hexachlorophene emulsions and antiseptic skin care of newborn infants. Med J Aust, Vol. 1, May 29, 1976, pp. 815-819.

Of 81,756 live births, there were 858 infant deaths and 63 instances of central nervous system vacuolation during the yrs 1959-1969. Prematurity is a necessary prerequisite for central nervous system vacuolation to occur during routine antiseptic skin care of newborn infants with 3% hexachlorophene solns. Normal newborn infants weighing more than 2,000 gm do not develop such central nervous system vacuolation during routine 3% hexachlorophene skin care. There is no rationale for regulations restricting the use of 3% hexachlorophene solns for routine antiseptic skin care of normal newborn infants. The benefits of such use far outweigh any possible risks from central nervous system vacuolation.

LANOLIN

(See Ref. Nos. 0085, 0092)

LANOLIN ALCOHOL

0085 Lepine, E.M., Results of routine office patch testing. Contact Dermatitis, V 1. 2, No. 2, 1976, pp. 89-91.

The results of routine patch testing in a general dermatology clinic over a period of 18 months are compared with the data recently reported by the North American Contact Dermatitis Group. Generally, the correlation was good. The cosmetic ingredients tested include wool wax alcohols (lanolin alcohol), p-phenylenediamine, lanolin USP, and a paraben mix.

M.M. Rieger

0086 Marzulli, F.N., and Maibach, H.I., Contact allergy: Predictive testing in man. Contact Dermatitis, Vol. 2, No. 1, 1976, pp. 1-17.

This review of contact allergy testing deals with predictive testing, which is needed to identify allergenic substances; diagnostic testing, which is required to determine what substances actually might be producing dermatological problems; and finally use testing, which provides information concerning the safety of ingredients in a particular combination in a product for a specific use. Details concerning the performance of 15 compounds used widely for patch testing by the North American Contact Group are described. These compounds include thimerosal, benzocaine, formaldehyde, parabens, and lanolin alcohol.

M.M. Rieger

(See also Ref. No. 0092)

METHANOL

(See Methyl Alcohol)

METHYL ALCOHOL

0087 DeFelice, A., Wilson, W., and Ambre, J., Vasoactive effects of methanol and sodium formate on isolated canine basilar artery. Toxicol Appl Pharmacol, Vol. 36, No. 3, Jun, 1976, pp. 595-601.

The effect of methanol (methyl alcohol) and other alcohols, sodium formate, and known vasoactive agents on isolated canine basilar artery was examined. Clinical concns of either methanol or sodium formate (approx 200 and 60 mg/ml, respectively, produced slight (5-10% max.) contraction. Tissues contracted similarly to methanol, ethanol (alcohol), and propanol (propyl alcohol)but relaxed to butanol (n-butyl alcohol) (10^{-3}-10^{-1}M). Order of potency of agents (in descending order) was serotonin, histamine, norepinephrine, tyramine, Ba^{2+}, sodium formate, and the alcohols.

MISCELLANEOUS

0088 Bruch, C.W., Microbiological quality assurance of eye products. Drug Cosmet Ind, Vol. 118, No. 6, Jun, 1976, pp. 49-53, 161-162.

This article discusses briefly: fungi in intraocular lenses; fungi in eye cosmetics; fungi in opthalmic drugs; microbiological safety of contact lenses; quality assurance for cosmetics; quality assurance for topical drugs; and quality assurance for oral drugs.

Roberta F. Nugent

0089 Fisher, A.A., and Dooms-Goossens, A., The effect of a perfume "ageing" on the allergenicity of individual perfume ingredients. Contact Dermatitis, Vol. 2, No. 3, 1976, pp. 155-159.

A perfume ingredient which is a known sensitizer may become non-allergenic by reaction with another ingredient of the fragrance during aging. In view of the many possibilities of chemical interactions (acetal or Schiff's base formation), it is recommended that sensitivity testing be conducted with an aged perfume rather than with the individual ingredients.

M.M. Rieger

0090 Jungermann, E., Antibacterial soaps on the normal flora of the skin. Cosmet Toiletries, Vol. 91, No. 7, Jul, 1976, pp. 50-59.

A no. of studies suggest that topical use of antimicrobial soaps can lead to changes in the skin's flora and to overgrowth of gram-negative microorganisms. A detailed review of available evidence, however, indicates that normal use of such soaps has no ill effects, although overuse might bring about an unhealthy shift in the proportionate populations of gram-positive and gram-negative microorganisms. The question is raised as to whether adding antimicrobials to soap is the most practical method of providing deodorant protection to consumers.

J.P. McCarthy

OIL OF CINNAMON

(See Cinnamon Oil)

PARABENS

(See Ref. Nos. 0085, 0086, 0092) lanolin alcohol propylene glycol

P-PHENYLENEDIAMINE

(See Ref. Nos. 0085, 0086) lanolin alcohol

PROPANOL

(See Propyl Alcohol)

PROPYL ALCOHOL

(See Ref. No. 0087) methyl alcohol

PROPYLENE GLYCOL

0091 Agren-Jonssons, S., and Magnusson, B., Sensitization to propantheline bromide, trichlorocarbanilide and propylene glycol in an antiperspirant. Contact Dermatitis, Vol. 2, No. 2, 1976, pp. 79-80.

This report deals with patch testing of a group of 14 patients who exhibited axillary dermatitis due to an antiperspirant based on an anticholinergic (propantheline bromide). Of these patients, 11 reacted to propantheline bromide, 3 to trichlorocarbanilide (triclocarban). Propylene glycol, the vehicle of the product, was responsbile for reactions in 6 patients at a concn of 10% but only 1 patient at a concn of 1%.

M.M. Rieger

0092 Hannuksela, M., Kousa, M., and Pirila, V., Allergy to ingredients of vehicles. Contact Dermatitis, Vol. 2, No. 2, 1976, pp. 105-110.

Common ingredients of vehicles, such as perfumes, antibacterial agents, emulsifiers and other surface active agents, propylene glycol, lanolin, and wool alcohols were tested in a large group of eczematous patients over a period of 3 yrs. Perfume allergy was detected in 3.6% of the cases, whereas the parabens caused reactions in 0.3% and the wool wax alcohols (lanolin alcohol) in 1.2% of the patients. Reactions to emulsifiers were observed in more than 1% of the subjects tested.

M.M. Rieger

SALICYLIC ACID

0093 Rudzki, E., and Koslowska, A., Sensitivity to salicylic acid. Contact Dermatitis, Vol. 2, No. 2, 1976, pp. 178-182.

Sensitivity to salicylic acid was demonstrated in 5 subjects during patch testing with 5% salicylic acid in yellow soft paraffin.

M.M. Rieger

SODIUM FLUORIDE

0094 De Lopez, O.H., Smith, F.A., and Hodge, H.C., Plasma fluoride concentrations in rats acutely poisoned with sodium fluoride. Toxicol Appl Pharmacol, Vol. 37, No. 1, Jul, 1976, pp. 75-83.

Female rats of average body weight 250g proved to be approximately twice as susceptible to the acute toxic effect of sodium fluoride (F) given po as were female rats weighing on the average 80 or 150g. The 24-hr oral LD50 values were 31, 54, and 52 mg of F/kg, respectively. In rats given 50 mg of F/kg, plasma fluoride concns (normally 0.3 μg/ml or less) increased to 10 μg/ml or more in 15 minutes in 80- or 150-g rats. Quantitatively similar increases were noted in 250-g rats given 25 mg or F/kg. Plasma fluoride concns of 8-10 μg/ml or higher were often associated with death, regardless of dose or body weight (age), but were achieved more rapidly in the heaviest rats. The greater resistance of the 80- and 150-g rats to the lethal effects of fluoride may reflect the greater efficiency of the younger skeletons in removing fluoride from the circulation.

TARTRAZINE

(See FD&C Yellow No. 5)

TEA-COCO-HYDROLYZED ANIMAL PROTEIN

0095 Emmett, E.A., and Wright, R.C., Allergic contact dermatitis from TEA-coco hydrolyzed protein. Arch Dermatol, Vol. 112, No. 7, Jul, 1976, pp. 1008-1009.

A 21-yr-old woman developed a severe dermatitis of the face after using a proprietary skin cleanser. Patch testing showed delayed hypersensitivity to TEA-coco hydrolyzed protein (TEA-coco-hydrolyzed animal protein) [the triethanolamine salt of the condensation product of coconut fatty acids with a complex of polypeptides and amino acids derived from collagen], but not to other ingredients of the cleanser. Further patch testing revealed positive results with other condensates of fatty acids and protein hydrolysates.

TEA-COCO HYDROLYZED PROTEIN

(See TEA-Coco Hydrolyzed Animal Protein)

TESTOSTERONE

0096 Anonymous, Hair-raising development. Family Health, Vol. VIII, No. 7, Jul, 1976, p. 25.

A hair cream shampoo treatment is described whereby a 90% reduction in hair fallout is reported. The treatment products are based on low concns of testosterone plus biotin. The biotin metabolizes testosterone on the skin, thereby eliminating the feminizing characteristics when applied to male skin.

R.L. Raymond

THIMEROSAL

(See Ref. No. 0086) lanolin alcohol

TRICHLOROCARBANILIDE

(See Triclocarban)

TRICLOCARBAN

(See Ref. No. 0091) propylene glycol

VINYL CHLORIDE

0097 Watanabe, P.G., McGowan, G.R., Madrid, E.O., and Gehring, P.J., Fate of [^{14}C] vinyl-chloride following inhalation exposure in rats. Toxicol Appl Pharmacol, Vol. 37, No. 1, Jul, 1976, pp. 49-59.

The objective of this study was to determine the fate of inhaled [^{14}C]vinyl chloride (VC) at different exposure concns in rats. Male rats were exposed to 10 or 1000 ppm [^{14}C]VC for 6 hr and the routes and rates of elimination of ^{14}C activity were followed for 72 hr after termination of exposure. The percent of recovered ^{14}C activity remaining in the carcass after 72 hr was 14 and 15% at their respective low and high exposure level. VC per se was not found in tissues. The fate of inhaled [^{14}C]VC was shown to be dose-dependent; this is consistent with previous studies on the fate of VC following ingestion as well as inhalation.

WOOL WAX ALCOHOLS

(See Lanolin Alcohol)

Articles referred to in this Bulletin are not available from the Cosmetic, Toiletry and Fragrance Association, Inc. Copies of the articles can usually be obtained from major technical libraries, or from the authors direct.

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