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W. Laundrie

September 16, 1982

cc: R.L. Jackson (please furnish info to H.E. Jewett)

send to me for transmittal

TO: SPI PVC Safety Group
SPI Manufacturing Technology Committee

RE: EPA Review of the Vinyl Chloride Standard

Ladies and Gentlemen:

The Manufacturing Technology Committee met on September 14, 1982, and discussed the Environmental Protection Agency's (EPA) letter of August 26, 1982 concerning revision of the vinyl chloride standard. The Committee concluded that the submission of data to EPA in support of the suggested revisions is critical. Another meeting of the Committee is scheduled for October 19 to compile information and prepare it for presentation to EPA at a meeting in early November. In the interim, we are requesting that you determine what data your firm possesses that would be helpful. Please bring this information to the next meeting or provide it to a Committee member or this office prior to October 19. The success of this effort may hinge on the substantiation of our suggestions with the necessary facts and figures. A list of the information we are requesting follows.

1. Exemption for discharges of less than 100 pounds. EPA is interested in:

(a) The impact of exempting these discharges, including the effect on total emissions and probable health impact. This might include both perimeter (community) monitoring data or air modeling data;

(b) The basis for selecting the 100-pound cut-off;

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(c) The basis for selecting the frequency limit of one discharge per 2,000 batches; and

(d) How often 2,000 batches would occur at an average plant with large reactors and an average plant with small reactors.

2. Weekly span check. EPA agreed that a weekly, rather than daily, emission monitoring span check would be less burdensome. The Agency would like to know:

(a) The time required to perform daily span checks;

(b) Interference with plant operations or other problems caused by the requirement of a daily check; and

(c) Data comparing monitor reliability of daily and weekly span checks.

3. Daily analytical compositing of stripping samples. While EPA considers the daily analytical compositing of stripping samples to be reasonable, it is concerned with the development of an analytical procedure to be specified. EPA would appreciate information on a suggested procedure including sample mixing, loss of vinyl chloride from the samples over time, and weighted average quantities based on production.

4. Revised definition for "emergency." EPA was not receptive to the substitution of the term "malfunction" in place of the term "emergency" because malfunction refers to routine maintenance on a control system and EPA wants plants to adopt control methods and technologies to prevent discharges. We are again soliciting suggestions for substitute language for the emergency discharge provision.

In our letter of September 9, 1982, we reported that EPA had published revised Test Methods 106 and 107 for the testing of vinyl chloride emissions. EPA has also approved Test Method 107A. 47 Fed. Reg. 39485 (Sept. 8, 1982)(copy attached). The Group filed a short set of comments in support of Test Method 107A after it was was proposed in February, 1981.

We look forward to receiving your data and suggested sources of information. If you have any comments or suggestions, please feel free to contact us.

Cordially yours,

Peter L. de la Cruz

Peter L. de la Cruz

Enclosure

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if we receive notice by 30 days from the date of this notice that someone wishes to submit critical comments, then EPA will publish: (1) A notice that withdraws the action, and (2) a notice that begins a new rulemaking by proposing the action and establishing a comment period.

The Office of Management and Budget has exempted this rule from the requirements of Section 3 of Executive order 12291.

Under 5 U.S.C. 605(b), the Administrator has certified that SIP approvals do not have a significant economic impact on a substantial number of small entities (See 46 FR 8709).

Under Section 307(b)(1) of the Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by November 8, 1982. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Air pollution control, Ozone, Sulfur oxides, Nitrogen dioxide, Lead, Particulate matter, Carbon monoxide, Hydrocarbons.

Note.—Incorporation by reference of the State Implementation Plan for the State of Illinois was approved by the Director of the Federal Register on July 1, 1982.

This notice is issued under authority of Sections 110 and 172 of the Clean Air Act, as amended (42 U.S.C. 7410 and 7502).

Dated: August 31, 1982.

Anne M. Gorsuch,

Administrator.

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

Title 40 of the Code of Federal Regulations, Chapter 1, Part 52 is amended by adding § 52.720, paragraph (c)(38) as follows:

§ 52.720 Identification of plan.

* * * * *

(c) * * *

(35) On May 10, 1982, the State submitted a February 4, 1982, Illinois Pollution Control Board Opinion and Order (PCB 81-184) granting a variance from the requirements of Rules 205(m)(1)(B) and 204(n)(1)(C) of Chapter 2 of the Air Pollution Control Regulations to the Lyon Metal Products, Incorporated, Montgomery, Illinois facility. This variance expires on May 31, 1985.

[FR Doc 82-24636 Filed 9-7-82, 8:45 am]

BILLING CODE 6560-50-M

40 CFR Part 61

[AD-FRL-2115-7]

Appendix B; Test Methods; Method 107A

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: Test Method 107A for vinyl chloride was proposed in the Federal Register on February 12, 1981 (46 FR 12188). This action promulgates the test method. The intended effect of this action is to allow all sources of vinyl chloride specified to conduct emission tests under Subparts A and F of 40 CFR Part 61 to hereafter (see effective date below) use this method for determining compliance.

EFFECTIVE DATE: September 8, 1982.

Under Section 307(b)(1) of the Clean Air Act, judicial review of this test method is available *only* by the filing of a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit within 60 days of today's publication of this rule. Under Section 307(b)(2) of the Clean Air Act, the requirements that are the subject of today's notice may not be challenged later in civil or criminal proceedings bought by EPA to enforce these requirements.

ADDRESSES: *Summary of Comments and Responses.* The summary of comments and responses for the proposed test method may be obtained from the U.S. EPA Library (MD-35), Research Triangle Park, North Carolina 27711, telephone number (919) 541-2777. Please refer to "Test Method 107A—Summary of Comments and Responses, EPA-450/3-82-004." The document contains a summary of all the public comments made on the proposed method and the Administrator's response to the comments.

Docket. A docket, number A-80-37, containing information considered by EPA in the development of this test method, is available for public inspection between 8:00 a.m. and 4:00 p.m. Monday through Friday, at EPA's Central Docket Section (A-130), West Tower Lobby, Gallery 1, 401 M Street, SW., Washington, D.C. 20460. A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: Roger T. Shigehara, Emission Measurement Branch, Emission Standards and Engineering Division (MD-19), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone (919) 541-2237.

SUPPLEMENTARY INFORMATION:

Public Participation

The test method was proposed and published in the Federal Register on February 12, 1981 (46 FR 12188). A public hearing was scheduled for March 26, 1981, but was not held since no one requested to speak. Public comments were solicited at the time of proposal. The public comment period was from February 12, 1981, to April 13, 1981.

Seven comment letters were received concerning issues relative to the proposed test method. The comments have been carefully considered, and it was determined that no changes were necessary in the proposed test method.

Significant Comment to the Proposed Test Method

Comments on the proposed test method were received from industry, industry counsel, engineering firms, and equipment manufacturers. A detailed discussion of these comments and responses can be found in the summary of comments and responses, which is referred to in the ADDRESSES section of this preamble. The major comments and responses are summarized in this preamble. The comments have been divided into the following areas:

Prior Approval of Method 107A

One commenter felt that Method 107A is very similar to methods in use before the regulation containing Method 107 was promulgated in 1977, and a great deal of time and money could have been saved had Method 107A been permitted originally.

The commenter apparently failed to recognize that Part 61 of Title 40, CFR, provides for approval by the Administrator of methods which have been demonstrated to the Administrator's satisfaction to produce results adequate for determination of compliance. Method 107 is an automated analytical technique that is best suited for the high-volume quality control analyses that are an integral part of most polyvinyl chloride facilities, but for those who may prefer to use another method, that option has always been a possibility.

Safety of Method 107A

One commenter stated that due to the hazards involved, the Agency should not recommend the use of pure vinyl chloride to prepare liquid calibration standards. Furthermore, due to the availability of standard reference materials from the National Bureau of Standards, the commenter believes that the accuracy of commercially prepared

gaseous vinyl chloride mixtures is probably far superior to any liquid standards prepared by the procedure described in the proposed method.

The Agency recognizes the need to exercise great caution in the use of pure vinyl chloride in Section 5, Safety, and Section 9.1, Preparation of Standards. Liquid standards are an integral part of the method, and gas standards would add considerable cost to the method without increasing the accuracy to a significant or necessary degree.

Citation of Brand Name Products

A manufacturer of gas chromatographs and accessories objected to the citations of brand name products (Sections 6.3.1, 6.3.2, 6.3.7), and suggested they be replaced with generic equivalents. In their opinion, many potential method users will never question a particular brand selection if one is cited.

While this may be true, most method users find it helpful to know which particular brand has been shown to produce satisfactory results. However, as the EPA does not have the capability to screen all products to determine acceptability, it believes the best course of action is to leave the method users the option to choose some other brand by adding the phrase "or equivalent" to each brand product cited.

Docket

The docket is an organized and complete file of all the information considered by EPA in the development of this rulemaking. The docket is a dynamic file, since material is added throughout the rulemaking development. The docketing system is intended to allow members of the public and industries involved to identify and locate documents readily so that they can intelligently and effectively participate in the rulemaking process. Along with the statement of basis and purpose of the proposed and promulgated test methods and EPA responses to significant comments, the contents of the docket will serve as the record in case of judicial review (Section 307(d)(7)(A)).

Miscellaneous

This rulemaking does not impose any additional emission measurement requirements on facilities affected by this rulemaking. Rather, this rulemaking allows the use of an alternative test method. If future standards impose different emission measurement requirements, the impacts of the alternative test method promulgated today will be evaluated during development of these standards.

Under Executive Order 12291, EPA must judge whether a regulation is "major" and, therefore, subject to the requirement of a regulatory impact analysis. This regulation is not major because it will not have an annual effect on the economy of $100 million or more; it will not result in a major increase in costs or prices; and there will be no significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of U.S.-based enterprises to compete with foreign-based enterprises in domestic or export markets. This regulation was submitted to the Office of Management and Budget for review as required by Executive Order 12291.

Pursuant to the provisions of 5 U.S.C. 605(b), I hereby certify that the attached rule will not have a significant economic impact on a substantial number of small entities because the rule does not impose any additional requirements.

List of Subjects in 40 CFR Part 61

Air pollution control, Asbestos, Beryllium, Hazardous materials, Mercury, Vinyl chloride.

Sec. 112, 114, 301(a) of the Clean Air Act, as amended (42 U.S.C. 7412, 7414, 7601(a))

Dated: August 24, 1982.

John W. Hernandez, Jr.,

Acting Administrator.

PART 61—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

Secton 61.67(g) and Appendix B of 40 CFR Part 61 are amended as follows:

1. By adding a sentence to § 61.67(g) as follows:

§ 61.67 Emission tests.

* * * * *

(g) * * * alternative is withdrawn. Whenever Test Method 107 is specified, and the conditions in Section 1.1, "Applicability" of Method 107A are met, Method 107A may be used.

* * * * *

2. By adding Method 107A to Appendix B to read as follows:

Appendix B—Test Methods

* * * * *

Method 107A—Determination of Vinyl Chloride Content of Solvents, Resin-Solvent Solution, Polyvinyl Chloride Resin, Resin Slurry, Wet Resin, and Latex Samples

Introduction

Performance of this method should not be attempted by persons unfamiliar with the operation of a gas chromatograph (GC) or by those who are unfamiliar with source sampling because knowledge beyond the scope of this presentation is required. Care must be exercised to prevent exposure of sampling personnel to vinyl chloride, a carcinogen.

1. Applicability and Principle

1.1 Applicability. This is an alternative method and applies to the measurement of the vinyl chloride content of solvents, resin solvent solutions, polyvinyl chloride (PVC) resin, wet cake slurries, latex, and fabricated resin samples. This method is not acceptable where methods from Section 304(h) of the Clean Water Act, 33 U.S.C. 1251 et seq., (the Federal Water Pollution Control Act Amendments of 1972 as amended by the Clean Water Act of 1977) are required.

1.2 Principle. The basis for this method lies in the direct injection of a liquid sample into a chromatograph and the subsequent evaporation of all volatile material into the carrier gas stream of the chromatograph, thus permitting analysis of all volatile material including vinyl chloride.

2. Range and Sensitivity

The lower limit of detection of vinyl chloride in dry PVC resin is 0.2 ppm. For resin solutions, latexes, and wet resin, this limit rises inversely as the nonvolatile (resin) content decreases.

With proper calibration, the upper limit may be extended as needed.

3. Interferences

The chromatograph columns and the corresponding operating parameters herein described normally provide an adequate resolution of vinyl chloride. In cases where resolution interferences are encountered, the chromatograph operator shall select the column and operating parameters best suited to his particular analysis problem, subject to the approval of the Administrator. Approval is automatic, provided that the tester produces confirming data through an adequate supplemental analytical technique, such as analysis with a different column or GC/mass spectroscopy, and has the data available for review by the Administrator.

4. Precision and Reproducibility

A standard sample of latex containing 181.8 ppm vinyl chloride analyzed 10 times by the alternative method showed a standard deviation of 7.5 percent and a mean error of 0.21 percent.

A sample of vinyl chloride copolymer resin solution was analyzed 10 times by the alternative method and showed a standard deviation of 6.6 percent at a level of 35 ppm.

5. Safety

Do not release vinyl chloride to the laboratory atmosphere during preparation of standards. Venting or purging with vinyl chloride monomer (VCM) air mixtures must be held to minimum. When purging is required, the vapor must be routed to outside air. Vinyl chloride, even at low-ppm levels, must never be vented inside the laboratory.

6. Apparatus

6.1 Sampling. The following equipment is required:

6.1.1 Glass Bottles. 16-oz wide mouth wide polyethylene-lined, screw-on tops.

6.1.2 Adhesive Tape. To prevent loosening of bottle tops.

6.2 Sample Recovery. The following equipment is required:

6.2.1 Glass Vials. 20-ml capacity with polycone screw caps.

6.2.2 Analytical Balance. Capable of weighing to ±0.01 gram.

6.2.3 Syringe. 50-microliter size, with removable needle.

6.2.4 Fritted Glass Sparger. Fine porosity.

6.2.5 Aluminum Weighing Dishes.

6.2.6 Sample Roller or Shaker. To help dissolve sample.

6.3 Analysis. The following equipment is required:

6.3.1 Gas Chromatograph. Hewlett Packard Model 5720A or equivalent.

6.3.2 Chromatograph Column. Stainless steel, 6.1 m by 3.2 mm, packed with 20 percent Tergitol E-35 on Chromosorb W AW 60/80 mesh. The analyst may use other columns provided that the precision and accuracy of the analysis of vinyl chloride standards are not impaired and that he has available for review information confirming that there is adequate resolution of the vinyl chloride peak. (Adequate resolution is defined as an area overlap of not more than 10 percent of the vinyl chloride peak by an interfering peak. Calculation of area overlap is explained in Apendix C, Procedure 1: "Determination of Adequate Chromatographic Peak Resolution.")

6.3.3 Valco Instrument Six-Port Rotary Valve. For column back flush.

6.3.4 Septa. For chromatograph injection port.

6.3.5 Injection Port Liners. For chromatograph used.

6.3.6 Regulators. For required gas cylinders.

6.3.7 Soap Film Flowmeter. Hewlett Packard No. 0101-0113 or equivalent.

6.4 Calibration. The following equipment is required:

6.4.1 Analytical Balance. Capable of weighing to ±0.0001 g.

6.4.2 Erlenmeyer Flask With Glass Stopper. 125 ml.

6.4.3 Pipets. 0.1, 0.5, 1, 5, 10, and 50 ml.

6.4.4 Volumetric Flasks. 10 and 100 ml.

7. Reagents

Use only reagents that are of chromatograph grade.

7.1 Analysis. The following items are required:

7.1.1 Hydrogen Gas. Zero grade.

7.1.2 Nitrogen Gas. Zero grade.

7.1.3 Air. Zero grade.

7.1.4 Tetrahydrofuran (THF). Reagent grade.

Analyze the THF by injecting 10 microliters into the prepared gas chromatograph. Compare the THF chromatogram with that shown in Figure 107A-1. If the chromatogram is comparable to A, the THF should be sparged with pure nitrogen for approximately 2 hours using the fritted glass sparger to attempt to remove the interfering peak. Reanalyze the sparged THF to determine whether the THF is acceptable for use. If the scan is comparable to B, the THF should be acceptable for use in the analysis.

7.1.5 N, N-Dimethylacetamide (DMAC). Spectrographic grade. For use in place of THF.

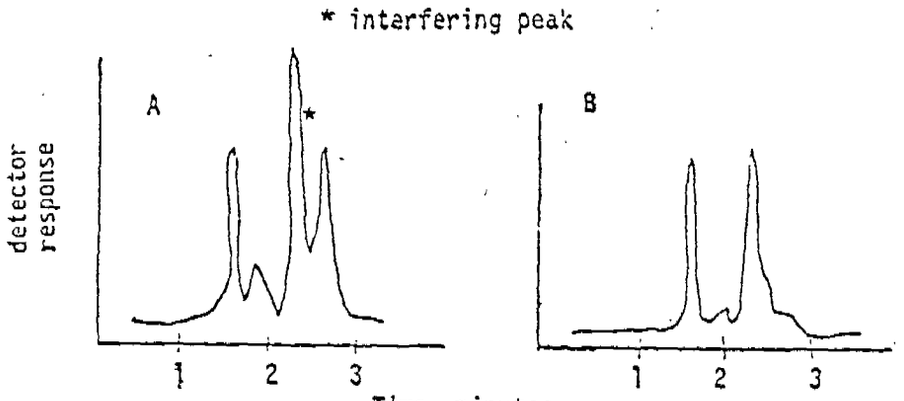

Figure 107A-1

7.2 Calibration. The following item is required:

7.2.1 Vinyl Chloride 99.9 Percent. Ideal Gas Products lecture bottle, or equivalent. For preparation of standard solutions.

8. Procedure

8.1 Sampling. Allow the liquid or dried resin to flow from a tap on the tank, silo, or pipeline until the tap has been purged. Fill a wide-mouth pint bottle, and immediately tightly cap the bottle. Place an identifying label on each bottle and record the date, time, sample location, and material.

8.2 Sample Treatment. Sample must be run within 24 hours.

8.2.1 Resin Samples. Weigh 9.00 ± 0.01 g of THF or DMAC in a tared 20-ml vial. Add 1.00 ± 0.01 g of resin to the tared vial containing the THF or DMAC. Close the vial tightly with the screw cap, and shake or otherwise agitate the vial until complete solution of the resin is obtained. Shaking may require several minutes to several hours, depending on the nature of the resin.

8.2.2 Suspension Resin Slurry and Wet Resin Samples. Slurry must be filtered using a small Buchner funnel with vacuum to yield a wet resin sample. The filtering process must be continued only as long as a steady stream of water is exiting from the funnel. Excessive filtration time could result in some loss of VCM. The wet resin sample is weighed into a tared 20-ml vial with THF or DMAC as described earlier for resin samples (8.2.1) and treated the same as the resin sample. A sample of the wet resin is used to determine total solids as required for calculating the residual VCM (Section 8.3.4).

8.2.3 Latex and Resin Solvent Solutions. Samples must be thoroughly mixed. Weigh 1.00 ± 0.01 g of the latex or resin-solvent solution into a 20-ml vial containing 9.00 ± 0.01 g of THF or DMAC as for the resin samples (8.2.1). Cap and shake until complete solution is obtained. Determine the total solids of the latex or resin solution sample (Section 8.3.4).

8.2.4 Solvents and Non-viscous Liquid Samples. No preparation of these samples is required. The neat samples are injected directly into the GC.

8.3 Analysis.

8.3.1 Preparation of GC. Install the chromatographic column, and condition overnight at 70° C. Do not connect the exit end of the column to the detector while conditioning.

8.3.1.1 Flow Rate Adjustments. Adjust the flow rate as follows:

a. Nitrogen Carrier Gas. Set regulator on cylinder to read 60 psig. Set column flow controller on the chromatograph using the soap film flowmeter to yield a flow rate of 40 cc/min.

b. Burner Air Supply. Set regulator on the cylinder at 40 psig. Set regulator on the chromatograph to supply air to the burner to yield a flow rate of 250 to 300 cc/min using the flowmeter.

c. Hydrogen. Set regulator on cylinder to read 60 psig. Set regulator on the chromatograph to supply 30 to 40 cc/min using the flowmeter. Optimize hydrogen flow to yield the most sensitive detector response without extinguishing the flame. Check flow with flowmeter and record this flow.

d. Nitrogen Back Flush Gas. Set regulator on the chromatograph using the soap film flowmeter to yield a flow rate of 40 cc/min.

8.3.1.2 Temperature Adjustments. Set temperature as follows:

a. Oven (chromatographic column) at 70° C.

b. Injection Port at 100° C.

c. Detector at 300° C.

8.3.1.3 Ignition of Flame Ionization Detector. Ignite the detector according to the manufacturer's instructions. Allow system to stabilize approximately 1 hour.

8.3.1.4 Recorder. Set pen at zero and start chart drive.

8.3.1.5 Attenuation. Set attenuation to yield desired peak height depending on sample VCM content.

8.3.2 Chromatographic Analyses.

a. Sample Injection. Remove needle from 50-microliter syringe. Open sample vial and draw 50-microliters of THF or DMAC sample recovery solution into the syringe. Recap sample vial. Attach needle to the syringe and while holding the syringe vertically (needle uppermost), eject 40 microliters into an absorbent tissue. Wipe needle with tissue. Now inject 10 microliters into chromatograph system. Repeat the injection until two consecutive values for the height of the vinyl chloride peak do not vary more than 5 percent. Use the average value for these two peak heights to compute the sample concentration.

b. Back Flush. After 4 minutes has elapsed after sample injection, actuate the back flush valve to purge the first 4 feet of the chromatographic column of solvent and other high boilers.

c. Sample Data. Record on the chromatograph strip chart the data from the sample label.

d. Elution Time. Vinyl chloride elutes at 2.8 minutes. Acetaldehyde elutes at 3.7 minutes. Analysis is considered complete when chart pen becomes stable. After 5 minutes, reset back flush valve and inject next sample.

8.3.3 Chromatograph Servicing.

a. Septum. Replace after five sample injections.

b. Sample Port Liner. Replace the sample port liner with a clean spare after five sample injections.

c. Chromatograph Shutdown. If the chromatogragph has been shut down overnight, rerun one or more samples from the preceding day to test stability and precision prior to starting on the current day's work.

8.3.4 Determination of Total Solids (TS). For wet resin, resin solution, and PVC latex samples, determine the TS for each sample by accurately weighing approximately 3 to 5 grams of sample into a tared aluminum pan. The initial procedure is as follows:

a. Where water is the major volatile component: Tare the weighing dish, and add 3 to 5 grams of sample to the dish. Weigh to the nearest milligram.

b. Where volatile solvent is the major volatile component: Transfer a portion of the sample to a 20-ml screw cap vial and cap immediately. Weigh the vial to the nearest milligram. Uncap the vial and transfer a 3- to 5-gram portion of the sample to a tared aluminum weighing dish. Recap the vial and reweigh to the nearest milligram. The vial weight loss is the sample weight.

To continue, now place the weighing pan in a 130° C oven for 1 hour. Remove the dish and allow to cool to room temperature in a desiccator. Weigh the pan to the nearest 0.1 mg. Total solids is the weight of material in the aluminum pan after heating divided by the net weight of sample added to the pan originally times 100.

9. *Calibration of the Chromatograph*

9.1 Preparation of Standards. Prepare a 1 percent by weight (approximate) solution of vinly chloride in THF or DMAC by bubbling vinyl chloride gas from a cylinder into a tared 125-ml glass-stoppered flask containing THF or DMAC. The weight of vinyl chloride to be added should be calculated prior to this operation, i.e., 1 percent of the weight of THF or DMAC contained in the tared flask. This must be carried out in a laboratory hood. Adjust the vinyl chloride flow from the cylinder so that the vinyl chloride dissolves essentially completely in the THF or DMAC and is not blown to the atmosphere. Take particular care not to volatize any of the solution. Stopper the flask and swirl the solution to effect complete mixing. Weigh the stoppered flask to nearest 0.1 mg to determine the exact amount of vinyl chloride added.

Pipet 10 ml of the approximately 1 percent solution into a 100-ml glass-stoppered volumetric flask, and add THF or DMAC to fill to the mark. Cap the flask and invert 10 to 20 times. This solution contains approximately 1,000 ppm by weight of vinyl chloride (note the exact concentration).

Pipet 50-, 10-, 5-, 1-, 0.5-, and 0.1-ml aliquots of the approximately 1,000 ppm solution into 10 ml glass stoppered volumetric flasks. Dilute to the mark with THF or DMAC, cap the flasks and invert each 10 to 20 times. These solutions contain approximately 500, 100, 50, 10, 5, and 1 ppm vinyl chloride. Note the exact concentration of each one. These standards are to be kept under refrigeration in stoppered bottles, and must be renewed every 3 months.

9.2 Preparation of Chromatograph Calibration Curve.

Obtain the GC for each of the six final solutions prepared in Section 9.1 by using the procedure in Section 8.3.2. Prepare a chart plotting peak height obtained from the chromatogram of each solution versus the known concentration. Draw a straight line through the points derived by the least squares methods.

10. *Calculations*

10.1 Response Factor. From the calibration curve described in Section 9.2, select the value of C_c that corresponds to H_c for each sample. Compute the response factor, R_f, for each sample as follows:

$$R_f = \frac{C_c}{H_c} \quad \text{Eq. 107A-1}$$

10.2 Residual vinyl chloride monomer concentration (C_{rvc}) or vinyl chloride monomer concentration in resin:

$$C_{rvc} = 10 H_s R_f \quad \text{Eq. 107A-2}$$

Where:

H_s = Peak height of sample, mm.

R_f = Chromatograph response factor.

10.3 Samples containing volatile material, i.e., resin solutions, wet resin, and latexes:

$$C_{rvc} = \frac{H_s R_f (1.000)}{TS} \quad \text{Eq. 107A-3}$$

10.4 Samples of solvents and in process wastewater:

$$C_{rvc} = \frac{H_s R_f}{0.888} \quad \text{Eq. 107A-4}$$

Where:

0.888 = Specific gravity of THF.

11. *Bibliography*

1. Communication from R. N. Wheeler, Jr., Union Carbide Corporation. Part 61 National Emissions Standards for Hazardous Air Pollutants Appendix B, Method 107—Alternate Method. September 19, 1977.

[FR Doc. 82-24530 Filed 9-7-82, 8:45 am]

BILLING CODE 6560-50-M

40 CFR Part 180

[PH-FRL 2201-7; PP 1E2542/R475]

Tolerances and Exemptions From Tolerances for Pesticide Chemicals in or on Raw Agricultural Commodities; Thiabendazole

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This rule establishes tolerances for residues of the fungicide thiabendazole in or on the raw agricultural commodities grapes and raises the established tolerance for milk from 0.1 ppm to 0.4 ppm. This regulation to establish a maximum permissible level for residues of the fungicide in or on the commodities was requested by Merck and Co.

EFFECTIVE DATE: Effective on September 8, 1982.

ADDRESS: Written objections may be submitted to the: Hearing Clerk (A-110), Rm. 3708, Environmental Protection Agency, 401 M St., SW., Washington, D.C. 20460.

FOR FURTHER INFORMATION CONTACT: Henry M. Jacoby, Product Manager (PM) 21, Registration Division, Office of Pesticide Programs, Environmental Protection Agency, Rm. 227, CM#2, 1921 Jefferson Davis Highway, Arlington, VA 22202 (703-557-1900).

SUPPLEMENTARY INFORMATION: EPA issued a notice published in the Federal Register of October 27, 1981 (46 FR 52418) which announced that Merck and Co., Inc., PO Box 2000, Rahway, NJ 07065, had submitted pesticide petition 1E2542 to the Agency proposing to amend 40 CFR 180.242(a) by establishing a tolerance for residues of the fungicide thiabendazole (2-(4-thiazolyl)benzimidazole) in or on the raw agricultural commodity grapes at 10 parts per million (ppm). The petition was subsequently amended, as published in the Federal Register of June 30, 1982 (47 FR 28452), by increasing the established tolerance under 40 CFR 180.242(b) for milk from 0.1 to 0.4 ppm.

There were no comments received in response to these notices of filing.

The data submitted in these petitions and other relevant material have been evaluated. The scientific data considered in support of these tolerances included a 2-year dog feeding study with no-observed-effect level (NOEL) of 50 mg/kg/day; a rat reproduction study with NOEL of 20 mg/kg/day; a rabbit teratology study with NOEL up to 800 mg/kg, (highest dose tested); a mouse reproduction study with NOEL of 150 mg/kg/day; a rat teratology study with NOEL up to 80 mg/kg (highest dose tested); a 2-year rat feeding study with NOEL of 10 mg/kg/day in which oncogenic potential is negative; and a mouse oncogenicity feeding study which had negative oncogenic potential at 800 mg/kg (female) and 300 mg/kg (male). Based on the rat feeding study with a NOEL of 200 ppm and using a 100-fold safety factor, the allowable daily intake (ADI) is 0.1000 mg/kg/day and the maximum permissible intake (MPI) is 6.0000 mg/day for a 60-kg person. Established tolerances and this proposed tolerances result in a maximum theoretical exposure of 1.7867 mg/day for a 60-kg person and utilization of 29.78 percent of the ADI. Tolerances have previously been established for residues of thiabendazole in or on a variety of raw agricultural commodities ranging from 0.1 to 10.0 ppm.