

Mixture/substance	Required test	FR citation
(i) Perfluoroalkylethyl acrylate copolymer, EPA-designated accession number (ACC) 171790	.....do .....	Do.
(ii) Perfluoroalkyl acrylate copolymer, ACC 158022	.....do .....	Do.
(iii) Perfluoroalkyl methacrylate polymer, EPA document control number (DCN) 6304000037A	.....do .....	Do.
(iv) Substituted methacrylate, propenoic acid, perfluoroalkyl esters, DCN 6304000033B	.....do .....	Do.
(v) Perfluoroalkyl acrylic polymer, DCN 6304000037C	.....do .....	Do.
(vi) Poly-.beta.-fluoroalkylethyl acrylate and alkyl acrylate, ACC 174993	.....do .....	Do.
(vii) Poly(.beta.-fluoroalkylethyl acrylate and alkyl acrylate), ACC 70430	.....do .....	Do.
(viii) Polysubstituted acrylic copolymer, ACC 157381	.....do .....	Do.
(ix) Perfluoroalkyl acrylate copolymer latex, ACC 70907	.....do .....	Do.

[55 FR 3059, Jan. 30, 1990, as amended at 70 FR 39629, 39636, July 8, 2005]

**Subpart D—Multichemical Test Rules**

**§ 799.5055 Hazardous waste constituents subject to testing.**

(a) *Identification of test substances.* (1) The table in paragraph (c) of this section identifies those chemical substances that shall be tested in accordance with this section.

(2) Substances of at least 98-percent purity shall be used as the test substances.

(b) *Persons required to submit study plans, conduct tests, and submit data.* All persons who manufacture (including import or manufacture as a byproduct) or process one or more of the substances in paragraph (c) of this section, other than as an impurity, after July 29, 1988, to the end of the reimbursement period shall submit letters of intent to conduct testing, submit study plans, conduct tests, and submit data, or submit exemption applications for those substances they manufacture or process, or intend to manufacture or process, as specified in this section, subpart A of this part, and parts 790 and 792 of this chapter for single-phase rulemaking.

(c) *Designation of testing.* The substances identified in the following table by name and CAS number shall be tested in accordance with the designated requirements under paragraphs (d) and (e) of this section. The paragraph numbers listed for a substance refer to the specific testing and reporting requirements specified in paragraphs (d) and (e) of this section.

Chemical name	CAS No.	Required testing under paragraphs (d) and (e) of this section
Acetamide, 2-fluoro .....	640–19–7	(e)(1)
Bis(2-chloroethoxy)methane.	111–91–1	(d)(2), (e)(1)
Bis(2-chloroisopropyl)ether.	108–60–1	(d)(2)
4-Bromobenzyl cyanide ...	16532–79–9	(d)(1), (2), (e)(1)
Bromoform .....	75–25–2	(d)(2)
4-Chlorobenzo-trichloride	5216–25–1	(e)(1)
2,4-D .....	94–75–7	(d)(2)
Dibromomethane 74–95–3 (d)(2).		
1,2-Dichlorobenzene .....	95–50–1	(d)(2)
1,1-Dichloroethane .....	75–34–3	(d)(2)
1,3-Dichloropropanol .....	96–23–1	(d)(1), (e)(1)
Dihydroxafrole .....	94–58–6	(d)(2)
Endrin .....	72–20–8	(d)(2)
Ethyl methacrylate .....	97–63–2	(d)(2)
Maleic hydrazide .....	123–33–1	(d)(1), (2)
Malononitrile .....	109–77–3	(d)(1), (e)(1)
Methanethiol .....	74–93–1	(d)(1)
Methyl chloride .....	74–87–3	(d)(2)
p-Nitrophenol .....	100–02–7	(e)(1)
Pentachlorobenzene .....	608–93–5	(d)(2)
Pentachloroethane .....	76–01–7	(d)(2)
1,2,4,5-Tetrachlorobenzene.	95–94–3	(d)(2)
Trichloromethanethiol .....	75–70–7	(d)(1), (2), (e)(1)

(d) *Chemical fate testing—(1) Soil adsorption—(i) Required testing.* A soil adsorption isotherm test shall be conducted with the substances designated in paragraph (c) of this section in accordance with § 796.2750 of this chapter except that the provisions of § 796.2750 (b)(1)(vii)(A) shall not apply to 1,3-Dichloropropanol.

(ii) *Reporting requirements.* The sediment and soil adsorption isotherm tests shall be completed and the final results submitted to EPA within 9 months of the effective date of the final rule except that final results for testing of 1,3-Dichloropropanol and Methanethiol shall be completed and

submitted to EPA within 11 months and 15 months, respectively, of the effective date of the final rule.

(2) *Hydrolysis*—(i) *Required testing*. A test of hydrolysis as a function of pH at 25 °C shall be conducted with the substances designated in paragraph (c) of this section in accordance with § 796.3500 of this chapter.

(ii) *Reporting requirements*. The hydrolysis tests with the substances designated in paragraph (c) of this section shall be completed and the final results submitted to EPA within 6 months of the effective date of the final rule except that hydrolysis tests for Dibromomethane, Dihydrosafrole, Ethyl methacrylate, and Methyl chloride shall be completed and the final results submitted to EPA within 12 months of the effective date of the final rule; and hydrolysis tests for 1,2-Dichlorobenzene and 1,2,4,5-Tetrachlorobenzene shall be completed and final results submitted to EPA within 9 months of the effective date of the final rule.

(e) *Health effects testing*—(1) *Subchronic toxicity*—(i) *Required test*. (A) An oral gavage subchronic toxicity test shall be conducted in the rat with the substances designated in paragraph (c) of this section except for bis(2-chloroethoxy) methane (CAS No. 111-91-1) in accordance with § 798.2650 of this chapter.

(B) For Bis(2-chloroethoxy)methane, an oral gavage subchronic toxicity test shall be conducted in the rat in accordance with § 798.2650 of this chapter except for the provisions in paragraphs (e)(9)(i)(A) and (e)(9)(i)(B). For Bis(2-chloroethoxy)methane, the following provisions also apply:

(1) Hematology determinations shall be carried out at least two times during the test period: Just after dosing on day 30 and just prior to terminal sacrifice. Hematology determinations which are appropriate to all studies are: Hematocrit, hemoglobin concentration, erythrocyte count, total and differential leukocyte count, and a measure of clotting potential such as clotting time, prothrombin time, thromboplastin time, or platelet count.

(2) Certain clinical biochemistry determinations on blood shall be carried out at least two times: Just after dos-

ing on day 30 and just prior to terminal sacrifice. Test areas which are considered appropriate to all studies are: Electrolyte balance, carbohydrate metabolism, and liver and kidney function. The selection of specific tests will be influenced by observations on the mode of action of the substance. Suggested determinations are: Calcium, phosphorus, chloride, sodium, potassium, fasting glucose (with the period of fasting appropriate to the species), serum glutamic oxaloacetic transaminase (now known as serum aspartate aminotransferase), ornithine decarboxylase, gamma glutamyl transpeptidase, urea nitrogen, albumen blood creatinine, total bilirubin and total serum protein measurements. Other determinations which may be necessary for an adequate toxicological evaluation include: Analysis of lipids, hormones, acid/base balance, methemoglobin, and cholinesterase activity. Additional clinical biochemistry may be employed, where necessary, to extend the investigation of observed effects.

(ii) *Reporting requirements*. (A) The oral gavage subchronic tests with the substances designated in paragraph (c) of this section shall be completed and submitted to EPA within 12 months of the effective date of the final rule except that the tests with Bis(2-chloroethoxy)methane, 1,3-Dichloropropanol, and Malononitrile shall be completed and the results submitted to EPA within 15 months of the effective date of the final rule.

(B) Progress reports for each test shall be submitted to the Agency 6 months after the effective date of the final rule.

(2) [Reserved]

(f) *Effective date*. (1) The effective date of the final rule is July 29, 1988, except for paragraphs (d)(1)(i), (d)(1)(ii), (d)(2)(ii), (e)(1)(i), and (e)(1)(ii)(A) of this section. The effective date of paragraphs (d)(1)(i), (d)(1)(ii), (d)(2)(ii), (e)(1)(i)(B) and (e)(1)(ii)(A) of this section is March 1, 1990. The effective date of paragraph (e)(1)(i)(A), is May 21, 1991.

(2) The guidelines and other test methods cited here are referenced as

they exist on the effective date of the final rule.

[53 FR 22324, June 15, 1988; 53 FR 48645, Dec. 2, 1988, as amended at 54 FR 49760, Dec. 1, 1989; 55 FR 7324, Mar. 1, 1990; 56 FR 23232, May 21, 1991; 58 FR 34205, June 23, 1993]

**§ 799.5075 Drinking water contaminants subject to testing.**

(a) *Identification of test substance.* (1) 1,1,2,2-tetrachloroethane (CAS No. 79-34-5), and 1,3,5-trimethylbenzene (CAS No. 108-67-8) shall be tested as appropriate in accordance with this section.

(2) A test substance of at least 99 percent purity shall be used for Chloroethane, 1,1-dichloroethane, and 1,3,5-trimethylbenzene. A test substance of at least 98 percent purity shall be used for 1,1,2,2-tetrachloroethane.

(b) *Persons required to submit study plans, conduct tests, and submit data.* All persons who manufacture (including import and by-product manufacture) or process, or who intend to manufacture or process, the substances listed in paragraph (a) of this section after the effective date of this section to the end of the reimbursement period shall submit letters of intent to test, submit study plans, conduct tests, and submit data, or submit exemption applications as specified in this section, subpart A of this part, and parts 790 and 792 of this chapter for single-phase rule-making, for the substances they manufacture subject to exclusions contained in § 790.42(a)(2), (a)(4) and (a)(5). These sections provide that processors, persons who manufacture less than 500 kg (1,100 lbs) annually, or persons who manufacture small quantities of the chemical solely for research and development as defined in § 790.42(a)(5) shall not be required to submit study plans, conduct tests and submit data, or submit exemption applications as specified in this section unless directed to do so in a subsequent notice as set forth in § 790.48(b).

(c) *Health effects testing*—(1) *Subacute toxicity*—(i) *Required testing.* (A) An oral 14-day repeated dose toxicity test shall be conducted with 1,1,2,2-tetrachloroethane, and 1,3,5-trimethylbenzene in accordance with § 798.2650 of this chapter except for the provisions in § 798.2650 (a), (b)(1), (c),

(e)(3), (e)(4)(i), (e)(5), (e)(6), (e)(7)(i), (e)(7)(iv), (e)(7)(v), (e)(8)(vii), (e)(9)(i)(A), (e)(9)(i)(B), (e)(11)(v), and (f)(2)(i). Each substance shall be tested in one mammalian species, preferably a rodent, but a non-rodent may be used. The species and strain of animals used in this test should be the same as those used in the 90-day subchronic test required in paragraph (c)(2)(i) of this section. The tests shall be performed using drinking water. However, if, due to poor stability or palatability, a drinking water test is not feasible for a given substance, that substance shall be administered either by oral gavage, in the diet, or in capsules.

(B) For the purpose of this section, the following provisions also apply:

(1) *Purpose.* To assess and evaluate the toxic characteristics of a substance, the determination of subacute toxicity should be carried out after initial information on toxicity has been obtained by acute testing. The 14-day repeated dose oral study provides information on the health hazard likely to arise from repeated short-term exposure by the oral route over a very limited period of time. It has been designed to permit the determination of the no-observed-adverse-effect level and toxic effects associated with continuous or repeated exposure to a test substance for 14 days and to evaluate reversibility, persistence, and delayed occurrence of toxic effects during a 14-day follow-up recovery period. The test is not capable of determining those effects that have a long latency period for development (e.g., carcinogenicity and life shortening). It will provide information on target organs and the possibility of accumulation, and can be used in selecting dose levels for subchronic studies and for establishing safety criteria for short-term human exposure.

(2) *Definitions.* Subacute oral toxicity is the manifestation of adverse effect(s) occurring as a result of the repeated daily exposure of experimental animals to a substance by the oral route for 14 days.

(3) *Principle of the test method.* The test substance is administered orally in graduated daily doses to several groups of experimental animals, one dose level