

(ii) *Reporting requirements.* (A) The developmental neurotoxicity test shall be completed and the final report submitted to EPA within 15 months of EPA's notification of the test sponsor by certified letter or FEDERAL REGISTER notice under paragraph (c)(3)(i) of this section that the testing shall be initiated.

(B) Progress reports shall be submitted to EPA every 6 months, beginning 6 months after the date of notification that the testing shall be initiated, until submission of the final report to EPA.

(4) *Pharmacokinetics*—(i) *Required testing.* (A) Pharmacokinetics testing of DGBE and DGBA will be conducted in rats by the dermal route of administration in accordance with §795.225 of this chapter, except for the provisions in paragraphs (b) (1)(ii) and (3)(i) of §795.225.

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

(1) *Animals.* Adult male and female Sprague Dawley rats shall be used. The rats shall be 7 to 8 weeks old and weigh 180 to 220 grams. Prior to testing, the animals shall be selected at random for each group. Animals showing signs of ill health shall not be used.

(2) *Observation of animals—Urinary and fecal excretion.* The quantities of <sup>14</sup>C excreted in urine and feces by rats dosed as specified in paragraph (b)(2)(iv) of §795.225 shall be determined at 8, 24, 48, 72, and 96 hours after dosing, and if necessary, daily thereafter until at least 90 percent of the dose has been excreted or until 7 days after dosing (whichever occurs first). Four animals per sex per dose group shall be used for this purpose.

(ii) *Reporting requirements.* (A) The pharmacokinetics tests shall be completed and the final reports submitted to EPA within 8 months of the effective date of the final amendment.

(B) A progress report shall be submitted to EPA 6 months from the effective date of the final amendment.

(d) *References.* For additional background information the following references should be consulted:

(1) Lamb, J.C. and Chapin, R.E. "Experimental models of male reproductive toxicology." In: "Endocrine Toxicology." Thomas, J.A., Korach, K.S.,

and McLachlan, J.A., eds. New York, NY: Raven Press. pp. 85-115. (1985).

(2) Clermont, Y. and Perey, B. "Quantitative study of the cell population of the seminiferous tubules in immature rats." *American Journal of Anatomy.* 100:241-267. (1957).

(3) Sadleir, R.M.F.S. "Cycles and seasons." In: "Reproduction in Mammals: I. Germ Cells and Fertilization." Austin, C.R. and Short, R.V., eds. New York, NY: Cambridge Press. Chapter 4. (1978).

(4) Mattison, D.R. and Thorgiersson, S.S. "Ovarian aryl hydrocarbon hydroxylase activity and primordial oocyte toxicity of polycyclic aromatic hydrocarbons in mice." *Cancer Research.* 39:3471-3475. (1979).

(5) Pederson, T. and Peters, H. "Proposal for classification of oocytes and follicles in the mouse ovary." *Journal of Reproduction and Fertility.* 17:555-557. (1968).

(6) Spencer, P.S., Bischoff, M.C., and Schaumburg, H.H. "Neuropathological methods for the detection of neurotoxic disease." In: "Experimental and Clinical Neurotoxicology." Spencer, P.S. and Schaumburg, H.H., eds. Baltimore, MD: Williams & Wilkins, pp. 743-757. (1980).

(7) Hafez, E.S., ed., "Reproduction and Breeding Techniques for Laboratory Animals." Chapter 10. Philadelphia: Lea & Febiger (1970).

(e) *Effective date.* (1) The effective date of the final rule is April 11, 1988, except for paragraph (c)(2)(ii)(A) of this section. The effective date for paragraph (c)(2)(ii)(A) of this section is March 1, 1990. The effective date for paragraphs (c)(4)(ii)(A) and (c)(4)(ii)(B) of this section is November 27, 1989.

(2) The guidelines and other test methods cited in this rule are referenced as they exist on the effective date of the final rule.

[53 FR 5950, Feb. 26, 1988, as amended at 54 FR 27357, June 29, 1989; 54 FR 41835, Oct. 12, 1989; 55 FR 7326, Mar. 1, 1990; 58 FR 34205, June 23, 1993]

#### §799.1575 Diethylenetriamine (DETA).

(a) *Identification of chemical test substance.* (1) Diethylenetriamine (CAS No. 111-40-0, also known as DETA) shall be tested in accordance with this part.

(2) Diethylenetriamine of at least 99 percent purity shall be used as the test substances in all tests.

(b) *Persons required to submit study plans, conduct tests and submit data.* All persons who manufacture or process diethylenetriamine from July 8, 1985, to the end of the reimbursement period shall submit letters of intent to test, exemption applications, and study plans and shall conduct tests and submit data as specified in this section, subpart A of this part and part 790 of this chapter (Test Rule Development and Exemption Procedures).

(c) *Health effects testing—(1) Mutagenic effects—Gene mutation—(i) Required testing.* (A) A sex-linked recessive lethal test in *Drosophila melanogaster* shall be conducted with DETA.

(B) A mouse specific locus assay shall be conducted with DETA, if the sex-linked recessive lethal test in *Drosophila melanogaster* conducted pursuant to paragraph (c)(1)(i)(A) of this section produces a positive result.

(ii) *Test standards.* (A) The testing for the sex-linked recessive lethal assay shall be conducted in accordance with the following revised EPA-approved modified study plan (June 19, 1986) originally submitted by the Diethylenetriamine Producers/Importers Alliance (DPIA): "Sex-linked recessive lethal test in *Drosophila melanogaster*," with modifications as approved by EPA on March 9, 1987, and May 21, 1987.

(B) The testing for the mouse visible specific locus assay shall be conducted in accordance with the following revised EPA-approved modified study plan (June 19, 1986) originally submitted by the Diethylenetriamine Producers/Importers Alliance (DPIA): "Mouse specific locus test for visible markers."

(C) These revised EPA-approved modified study plans are available for inspection in the Non-Confidential Information Center (NCIC) (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room B-607 NEM, 401 M St., SW., Washington, DC 20460, between the hours of 12 p.m. and 4 p.m. weekdays excluding legal holidays.

(iii) *Reporting requirements.* (A) The sex-linked recessive lethal test of

DETA in *Drosophila melanogaster* shall be completed and a final report submitted to the Agency within 14 months from the effective date of the final Phase II rule. Two interim progress reports shall be submitted at 6-month intervals, the first of which is due within 6 months of the effective date of the final Phase II rule.

(B) If required pursuant to paragraph (c)(1)(i)(B) of this section, the mouse specific locus test of DETA for visible markers shall be completed and a final report submitted to the Agency within 48 months from the designated date contained in EPA's notification of the test sponsor by certified letter or FEDERAL REGISTER notice that testing should be initiated. Seven interim progress reports shall be submitted at 6-month intervals, the first of which is due within 6 months of EPA's designated date.

(2) *Mutagenic effects—Chromosomal aberrations—(i) Required testing.* (A) An *in vitro* cytogenetics test shall be conducted with DETA.

(B) An *in vivo* cytogenetics test shall be conducted with DETA, if the *in vitro* cytogenetics test conducted pursuant to paragraph (c)(2)(i)(A) of this section produces a negative result.

(C) A dominant lethal assay shall be conducted with DETA, if either the *in vitro* cytogenetics test conducted pursuant to paragraph (c)(2)(i)(A) of this section or the *in vivo* cytogenetics test conducted pursuant to paragraph (c)(2)(i)(B) of this section produces a positive result.

(D) A heritable translocation assay shall be conducted with DETA, if the dominant lethal assay conducted pursuant to paragraph (c)(2)(i)(C) of this section produces a positive result.

(ii) *Test standards.* (A) The testing for cytogenetic effects shall be conducted in accordance with the following revised EPA-approved modified study plan (June 19, 1986) originally submitted by the Diethylenetriamine Producers/Importers Alliance (DPIA): "*In vitro* cytogenetics test" and "*In vivo* cytogenetics test," with modifications as approved by EPA on March 9, 1987, and May 21, 1987.

(B) Other testing for cytogenetic effects shall be conducted in accordance

with the following revised EPA-approved modified study plans (June 19, 1986) originally submitted by the Diethylenetriamine Producers/Importers Alliance (DPIA): “Dominant lethal assay of diethylenetriamine in CD rats,” and “Heritable translocation of diethylenetriamine in CD-1 mice.”

(C) These revised EPA-approved modified study plans are available for inspection in the Non-Confidential Information Center (NCIC) (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room B-607 NEM, 401 M St., SW., Washington, DC 20460, between the hours of 12 p.m. and 4 p.m. weekdays excluding legal holidays.

(iii) *Reporting requirements.* (A) The *in vitro* cytogenetics testing of DETA shall be completed and a final report submitted to the Agency within 6 months of the effective date of the final Phase II rule.

(B) If required pursuant to paragraph (c)(2)(i)(B) of this section, the *in vivo* cytogenetics testing of DETA shall be completed and final report submitted to the Agency within 14 months of the effective date of the final Phase II rule. One interim progress report shall be submitted within 12 months of the final rule’s effective date.

(C) If required pursuant to paragraph (c)(2)(i)(C) of this section, the dominant lethal testing of DETA shall be completed and a final report submitted to the Agency within 20 months of the effective date of the final Phase II rule.

(D) If required pursuant to paragraph (c)(2)(i)(D) of this section, the heritable translocation testing of DETA shall be completed and a final report submitted to the Agency within 18 months of the designated date contained in EPA’s notification of the test sponsor by certified letter or FEDERAL REGISTER notice that testing should be initiated. Two interim progress reports shall be submitted at 6-month intervals, the first of which is due within 6 months of EPA’s designated date.

(3) *Subchronic effects*—(i) *Required testing.* A ninety-day oral subchronic toxicity test shall be conducted with DETA in at least one mammalian species.

(ii) *Test standard.* The testing shall be conducted in accordance with the fol-

lowing revised EPA-approved modified study plans (June 19, 1986) originally submitted by the Diethylenetriamine Producers/Importers Alliance (DPIA): “Ninety-Day (subchronic) dietary toxicity study with diethylenetriamine in albino rats,” with modifications approved by EPA on March 9, 1987, and May 21, 1987. This revised EPA-approved modified study plans is available for inspection in the Non-Confidential Information Center (NCIC) (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room B-607 NEM, 401 M St., SW., Washington, DC 20460, between the hours of 12 p.m. and 4 p.m. weekdays excluding legal holidays.

(iii) *Reporting requirements.* The testing shall be completed and a final report submitted to the Agency within 15 months of the effective date of the final Phase II rule. Two interim progress reports shall be submitted at 6-month intervals, the first of which is due within 6 months of the effective date of the final Phase II rule.

(d) *Chemical fate testing*—(1) *Required testing.* Testing to assess *N*-nitrosamine formation, resulting from aerobic biological and/or chemical transformation, shall be conducted with DETA using environmental samples of lake water, sewage, and soil.

(2) *Test standard.* The testing shall be conducted in accordance with the following revised EPA-approved modified study plan (June 7, 1990) originally submitted by the Diethylenetriamine Producers/Importers Alliance (DPIA): “Modified Final Copy (04-17-90); Diethylenetriamine: Environmental Fate in Sewage, Lake Water and Soil”. This revised EPA-approved modified study plans are available for inspection in the Non-Confidential Information Center (NCIC) (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room B-607 NEM, 401 M St., SW., Washington, DC 20460, between the hours of 12 p.m. and 4 p.m. weekdays excluding legal holidays.

(3) *Reporting requirements.* The testing shall be completed and a final report submitted to EPA within 20 months of the effective date of the final Phase II rule. Interim progress reports shall be submitted at 6-month intervals, the

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first of which is due within 6 months of the effective date of the final Phase II rule.

(e) *Modifications.* Persons subject to this section are not subject to the requirements of § 790.50(a)(2)(ii) of this chapter.

(f) *Effective date.* (1) The effective date of the final Phase II rule for diethylenetriamine is March 19, 1987, except for paragraphs (c)(4)(iii), (d)(2), and (d)(3) of this section. The effective date of paragraphs (c)(4)(iii), and (d)(3) of this section is March 1, 1990. The effective date for paragraph (d)(2) of this section is May 21, 1991.

(2) The guidelines and other test methods cited in this rule are referenced as they exist on the effective date of the final rule.

[50 FR 21412, May 23, 1985; 50 FR 33543, Aug. 20, 1985; 51 FR 3468, Jan. 28, 1986; 51 FR 4736, Feb. 7, 1986; 52 FR 3238, Feb. 3, 1987; 54 FR 27356, June 29, 1989; 55 FR 3408, Feb. 1, 1990; 55 FR 7326, Mar. 1, 1990; 56 FR 23230, May 21, 1991; 58 FR 34205, June 23, 1993; 60 FR 34467, July 3, 1995]

### § 799.1645 2-Ethylhexanol.

(a) *Identification of test substance.* (1) 2-Ethylhexanol (CAS No. 104-76-7) shall be tested in accordance with this section.

(2) 2-Ethylhexanol of at least 99.0-percent purity shall be used as the test substance.

(b) *Persons required to submit study plans, conduct tests, and submit data.* All persons who manufacture or process, or intend to manufacture or process 2-ethylhexanol, other than as an impurity, from the effective date of this final rule to the end of the reimbursement period shall submit letters of intent to conduct testing, submit study plans, conduct tests, and submit data or exemption applications as specified in this section, subpart A of this part, and parts 790 and 792 of this chapter for single-phase rulemaking.

(c) *Health effects*—(1) *Oncogenic effects*—(i) *Required testing.* (A) Oncogenicity tests shall be conducted in Fisher 344 rats and B6C3F1 mice by the oral route with 2-ethylhexanol in accordance with § 798.3300 of this chapter, except for the provisions in § 798.3300(b)(6).

(B) For the purpose of this section, the following provisions also apply to the oncogenicity tests: (1) *Administration of the test substance.* 2-Ethylhexanol shall be administered either by microencapsulation before adding it to the diet or by gavage.

(2) [Reserved]

(ii) *Reporting requirements.* (A) The study plan for the oncogenicity test shall be submitted at least 45 days before the initiation of testing.

(B) The oncogenicity testing shall be completed and final report submitted to the Agency within 53 months of the effective date of this final rule if 2-ethylhexanol is administered by gavage or within 56 months of the effective date of this final rule if administered by microencapsulation.

(C) Interim progress reports shall be submitted to EPA at 6-month intervals beginning 6 months after the effective date of the final rule, until the final report is submitted to EPA.

(2) [Reserved]

(d) *Effective date.* The effective date of this final rule requiring oncogenicity testing of 2-ethylhexanol is September 16, 1987.

[52 FR 28704, Aug. 3, 1987, as amended at 58 FR 34205, June 23, 1993]

### § 799.1700 Fluoroalkenes.

(a) *Identification of test substances.* (1) Vinyl fluoride (VF; CAS No. 75-02-5), vinylidene fluoride (VDF; CAS No. 75-38-7), tetrafluoroethene (TFE; CAS No. 116-14-3), and hexafluoropropene (HFP; CAS No. 116-15-4) shall be tested in accordance with this section.

(2) VF, VDF, TFE, and HFP of at least 99 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 VF, VDF, TFE, or HFP, other than as an impurity, from July 22, 1987 to the end of the reimbursement period shall submit letters of intent to conduct testing or exemption applications, submit study plans, conduct tests in accordance with the TSCA Good Laboratory Practice Standards (40 CFR part 792), and submit data as specified in this section, subpart A of this part, and part 790 of