Results of Testing

Chemical Name	CAS No.	Study Code/Type	Protocol/Guideline	Species	Exposure	Dose/Concentration	No. per Group	Results	Reference
4-Chlorobenzo-trifluoride	98-56-6	EEBIOC Bioconcentration	Non-TSCA Protocol/ Guideline (docket OPTS-42026)	Bluegill sunfish	96 hr, flow-through	0.025, 0.250 ppm (nominal)	Not specified	Bioconcentration values were determined to be 121.8 to 202.0. This demonstrates that the test material has a low to moderate potential for bioaccumulation in fish. The rapid and extensive elimination of the radioactive residues indicates that the test compound-related residues would not persist in fish tissue after removal from exposure.	48 FR 53159; 11/25/83 OTS0507307
4-Chlorobenzo-trifluoride	98-56-6	EECLIF Fish early life stage	Non-TSCA Protocol/ Guideline (docket OPTS-42026)	*Pimephales promelas* (fathead minnow)	31 days	0.070, 0.12, 0.26, 0.54, 1.4 mg/L	Not specified	Exposure to concentrations as high as 1.4 mg/l had no effect on percentage hatch of embryos. However, percentage survival of larvae to 1.4 mg/L was significantly reduced. Exposure to concentrations less than 1.4 mg/L had no effect on larvae survival. Mean total length and averae wet weight of larvae was unaffected.	48 FR 32730 OTS0508145
4-Chlorobenzo-trifluoride	98-56-6	EECTOX Daphnid chronic toxicity	Non-TSCA Protocol/ Guideline (docket OPTS-42026)	*Daphnia magna*	21 d, flow-through	0.01, 0.03, 0.05, 0.14, 0.20 mg/L	Not specified	The LC_{50} values for 4, 7, 14, and 21 days, respectively, were 0.163, 0.150, 0.073, and 0.071 mg/L. The no-effect level was 0.03 mg/L. Decreased reproduction was noted at 0.05 mg/L.	OTS0508142
4-Chlorobenzo-trifluoride	98-56-6	EFADEG Atmospheric fate	Non-TSCA Protocol/ Guideline (docket OPTS-42026)	Not applicable	75-, and 175-liter 2-chambered teflon bag, ultrazero or zero air with added NO_2, blacklight irradiation.	Not applicable	Not applicable	The rate constants determined were: k(OH) = $(2.3 \pm 0.8) \times 10^{-13}$ cm^3 $molecule^{-1}$ sec^{-1}; k(photolysis) = $<2.7 \times 10^{-6}$ sec^{-1}, and $k(O_3) = <5 \times 10^{-21}$ cm^3 $molecule^{-1}$ sec^{-1}. Estimated atmospheric lifetimes due to these reactions were ~50 days for the reaction with OH radicals, >6.5 days for photolysis, and >8.8 years for the reaction with O_3.	50 FR 5421; 2/6/85 OTS0508169
4-Chlorobenzo-trifluoride	98-56-6	EFADEGPHOT Photolysis in water	Non-TSCA Protocol/ Guideline (docket OPTS-42026)	Not applicable	28 d, sterile water, sunlight	10 µg/mL	Not applicable	The results indicate that the test material did not dissipate during the 28 day study.	48 FR 53159; 11/25/83 OTS0507306
4-Chlorobenzo-trifluoride	98-56-6	EFBDEG Aerobic biodegrada-tion	Non-TSCA Protocol/ Guideline (docket OPTS-42026)	Not applicable	11 d, soil and sewage	4, 8, 10 mg carbon/L	Not applicable	Based on the data obtained, no conclusions could be drawn concerning biodegradation of the test material. The highly volatile nature of the test material caused significant losses of radioactivity from the cultures. Only 13% of the initial theoretical radioactivity could be accounted for in day 0 samples. By the 5th day, less than 2% remained. The study, which was scheduled to last for 28 days, was terminated on the 11th day.	49 FR 18779; 5/2/84 OTS0507306

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4-Chlorobenzo-trifluoride	98-56-6	EFBDEG Anaerobic biodeg-radation	Non-TSCA Protocol/ Guideline (docket OPTS-42026)	Not applicable	59 d, anaerobic digester sludge	8 µL/vial, equivalent to 50 mg carbon/L of medium	Not applicable	Samples were extracted and quantified using gas chromatography-mass spectrometer. The gas evolution data indicated that all of the ethanol and 64% of the test material was biodegraded during the 59-day test. The test material had a slight inhibitory effect on gas production during the first 17 days, but this condition disappeared during the next 7 days. A total of 96% of the added test material was accounted for either as evolved gas or residual test material in the sludge-containing test vials. Only 23% could be accounted for in the sludge-free controls. It was theorized that 77% was lost through either leakage, adsorption to the stopper, or through non-biological degradation. Due to the volatility of the test material, it is theorized that it would not accumulate in any natural anaerobic environment.	49 FR 18779; 5/2/84 OTS0507306
4-Chlorobenzo-trifluoride	98-56-6	EFTSPT Soil and sediment adsorption isotherm	Non-TSCA Protocol/ Guideline (docket OPTS-42026)	Not applicable	4 hr, clay and sandy loams, 2 aquatic sediments	0.0847, 0.221, 0.530, 2.45, 4.07, 9.92 µL/mL	Not applicable	Six different concentrations of ^{14}C labeled test material were equilibrated with 5 gram portions of soil or sediment. Adsorption coefficients (K_a) ranged from 3.65 for the sandy loam soil to 9.10 for the clay loam soil. The corresponding adsorption coefficients based upon soil organic carbon (K_{oc}) ranged from 420 to 530.	49 FR 18779; 5/2/84 OTS0507306
4-Chlorobenzo-trifluoride	98-56-6	EFTSPTVOLZ Volatilization from water	Non-TSCA Protocol/ Guideline (docket OPTS-42026)	Not applicable	water	10 mg/L	Not applicable	In the experiment, 1800 mL of water was purged with nitrogen (to remove dissolve oxygen), and then fortified with the test material to a final concentration of 10 mg/L. The ratio of volatilization rate to the oxygen reaeration rate (K_{PCBT}/K_{O2}) was determined to be 0.64 ± 0.04. This result shows that the volatilization rate from natural waters was slightly slower than the oxygen reaeration rate.	49 FR 18779; 5/2/84 OTS0507306
4-Chlorobenzo-trifluoride	98-56-6	HEADME Metabolism study	Non-TSCA Protocol/ Guideline (docket OPTS-42026)	rat	gavage, single dose	1.0 mg/kg	3 male; 5 female	Of the administered label, 3 to 4% was excreted in the feces and 14 to 15% was excreted in the urine over the 4 day test period. 62 to 82% of the dose was rapidly expired unchanged by the test animals (the time period for expiration was not reported). The test material was excreted unchanged as the major fecal constituent. Levels of labelled residues in the tissues were low; 4 days after dosing, 1% of the applied label remained and was located in fat tissue.	48 FR 20132; 5/4/83 OTS0507284
4-Chlorobenzo-trifluoride	98-56-6	HEATOX Acute oral toxicity	Non-TSCA Protocol/ Guideline (docket OPTS-42026)	rat	oral (gavage), single dose	5 ml/kg body weight	8/sex	Mortality in two males. LD_{50} is estimated to be >5 ml/kg. Clinical signs included hypoactivity, tremors, ataxia, decreased limb tone, piloerection, and blood on nose. Lesions were seen in the thymus, lungs and in the uterus of one female.	OTS0508138

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4-Chlorobenzo-trifluoride	98-56-6	HECTOXTRFM Morphological transformation	Non-TSCA Protocol/ Guideline (docket OPTS-42026)	mouse	*in vitro*	0, 10, 30, 100, 300, µg/mL	Not applicable	There was no significant increase in the appearance of transformed foci in Balb/C-3T3 cells over the concentration range tested, with or without S9 activation. Toxicity to cells was apparent at 300 µg/ml. At this level, the compound was not completely soluble.	49 FR 18779; 5/2/84 OTS0507306
4-Chlorobenzo-trifluoride	98-56-6	HEGTOXCHRM Mammalian chromosomal aberration test	Non-TSCA Protocol/ Guideline (docket OPTS-42026)	rats	single dose, gavage	0, 0.5, 1.7, 5.0 mL/kg	5 male; 5 female	Results showed that the test material did not induce chromosomal aberrations in male or female test animals. Clinical signs of toxicity included excess lacrimation and salivation in the male and female animals receiving 5 mL/kg. Male and female animals receiving 5 and 1.7 mL/kg appeared lethargic. No mortalities were observed at 5.0 mg/kg or less.	48 FR 20132; 5/4/83 OTS0507306
4-Chlorobenzo-trifluoride	98-56-6	HERTOXTERE Reproductive/fertility effects	Non-TSCA Protocol/ Guideline (docket OPTS-42026)	rat	oral (gavage). 4 wks prior to mating continuously through one reproduction period until F1 litters were weaned; selected F1 rats were exposed for 90 days, then sacrificed	0, 5, 15, 45 mg/kg/day	Not specified	Mid- and high-dose F_0 rats showed decreased weight and weight gain. F_1 female rats had decreased weight gain and monocytes, increased serum glutamic-pyruvic transaminase, decreased red blood cell counts, and mean corpuscular hemoglobin (both sexes), and lung lesions.	OTS0508148
4-Chlorobenzo-trifluoride	98-56-6	HESTOX Subchronic oral toxicity	Non-TSCA Protocol/ Guideline (docket OPTS-42026)	rat	gavage, 1x/d; 90 d	0, 10, 40, 150, 500 mg/kg/d	15 male; 15 female	No physical signs of toxicity were observed in males or females during treatment. Observations included an initial decrease in mean body weight gain, decreased mean food consumption, decreased efficiency of food utilization, and mild proteinuria in males at 500 mg/kg and in females at 150 and 500 mg/kg. Increased liver weights at all doses in males, and at the three highest doses in females. Significant effects observed only in male test animals were decreased erythrocytes, hemoglobin, and mean corpuscular volume at 500 mg/kg, and packed cell volume at 150 and 500 mg/kg.	48 FR 53159; 11/25/83 OTS0507306