(25 °C). In ethanol 530, acetone 800 (both in g/l, 25 °C). Soluble in methanol, isopropyl ether, and petroleum ether. Sparingly soluble in toluene. **Stability** Slowly oxidised in air. Acidic in reaction, and forms salts with aqueous alkalis. **pKa** pK_1 7.6; pK_2 11.6.

COMMERCIALISATION

History Its activity against mildew on cotton fabrics described by P. B. Marsh & M. L. Butler (*Ind. Eng. Chem.*, 1946, **38,** 701). Introduced by Sindar Corp. and by BDH Ltd **Patents** US 2334408 **Manufacturer** Pan Britannica; Rhône-Poulenc.

APPLICATIONS

Mode of action Algicide, fungicide, and bactericide with contact action. **Uses** Control of moss, red thread, *Fusarium* patch, and dollar spot in turf; and of moss on paths, walls, roofs, and non-crop land. Fungicidal, bactericidal and algicidal protection of horticultural benches and equipment, textiles, etc. for control of moulds and algae. Also used as an anthelmintic. **Formulation type** EC; SL. **Principal tradename** 'Super Mosstox' (Rhône-Poulenc).

ANALYSIS

Product analysis by colorimetry (*AOAC Methods,* 1984, 36.243-36.247; J. R. Clements & S. H. Newburger, *J. Assoc. Off. Agric. Chem.*, 1954, **37,** 190).

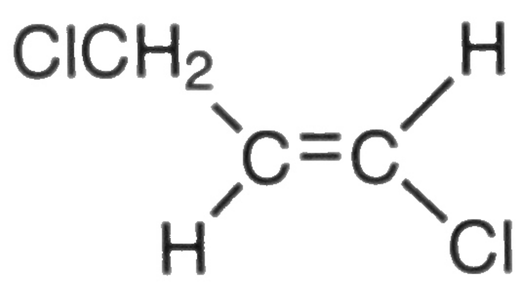
MAMMALIAN TOXICOLOGY

Acute oral LD_{50} for rats 2690, mice 1000, guinea pigs 1250, dogs 2000 mg/kg. **NOEL** In 90 d feeding trials, rats receiving 2000 mg/kg diet showed no ill-effects.
Toxicity class WHO III; EPA III.

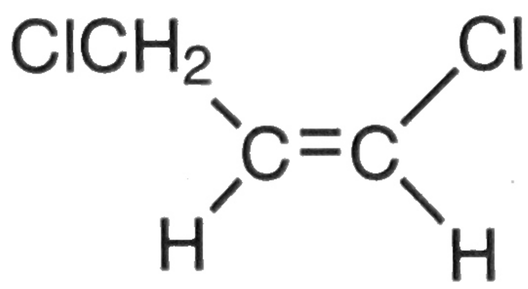
ECOTOXICOLOGY

Fish Toxic to fish.

208 1,3-dichloropropene *Nematicide*



(*E*)



(*Z*)

NOMENCLATURE

Common name 1,3-dichloropropene (BSI, E-ISO accepted in lieu of a common name), dichloro-1,3 propene (F-ISO).
IUPAC name (*EZ*)-1,3-dichloropropene.
C.A. name 1,3-dichloro-1-propene. **CAS RN** *[542-75-6]* (*E*)- + (*Z*)- isomers; *[10061-02-6]* (*E*)- isomer; *[10061-01-5]* (*Z*)- isomer.