

141). Residues determined by glc (*Anal. Methods Pestic. Plant Growth Regul.*, 1972, **6**, 584) or by colorimetry (*AOAC Methods*, 1990, 965.36).

MAMMALIAN TOXICOLOGY

Acute oral LD₅₀ for rats 1300 mg/kg. **Skin and eye** Acute percutaneous LD₅₀ for rabbits 5000 mg/kg. Irritating to skin under warm conditions. **NOEL** In 2 y feeding trials, rats receiving 1500 mg/kg diet showed no ill-effects.

ECOTOXICOLOGY

Fish LC₅₀ (48 h) for brown trout 0.31 mg/l. **Bees** Not toxic to bees.
Daphnia EC₅₀ 0.014 mg/l.

ENVIRONMENTAL FATE

Plants In plant cells, both chlorine atoms are replaced by sulfhydryl groups to give a substituted dimercapto compound.

206 dichlormid

Herbicide safener

chloroamide



NOMENCLATURE

Common name dichlormid (WSSA).

IUPAC name *N,N*-diallyl-2,2-dichloroacetamide.

C.A. name 2,2-dichloro-*N,N*-di-2-propenylacetamide. **CAS RN** [37764-25-3]

Development code R-25788.

PHYSICO-CHEMICAL PROPERTIES

Composition Tech. grade is *c.* 95% pure.

Mol. wt. 208.1 **Mol. formula** C₈H₁₁Cl₂NO

Form Clear viscous liquid; (tech., amber-to-brown). **M.p.** 5.0-6.5 °C (tech.) **V.p.** 800 mPa (25 °C) **SG/density** 1.202 (20 °C); tech., 1.192-1.204 **K_{ow}** (25 °C) 69 ± 5

Solubility In water *c.* 5 g/l. In kerosene *c.* 15 g/l. Miscible with acetone, ethanol, and xylene. **Stability** Unstable above 100 °C. Decomposes violently if heated with iron. Stable to light.

COMMERCIALISATION

History Its use to enhance herbicidal selectivity reported by F. Y. Chang *et al.* (*Can. J. Plant Sci.*, 1972, **52**, 707). G. R. Stephenson (*J. Agric. Food Chem.*, 1978, **26**, 137) compared the chemical structure/biological activity of analogues.

Introduced by the Stauffer Chemical Co. (now Zeneca). **Patents** US 4137070

Manufacturer Zeneca.