

APPLICATIONS

Mode of action Herbicide safener. See R. E. Wilkinson (*Chemistry and Mode of Action of Herbicide Antidotes*, p. 85). **Uses** Increases the tolerance of maize to thiocarbamate herbicides. **Formulation type** EC; GR; Liquid; CS; CG.

Principal tradename 'Eradicane' (mixture) (Zeneca). **Mixtures** [dichlormid +] butylate; EPTC; vernolate; atrazine + butylate.

ANALYSIS

Product and residue analysis by capillary glc, details available from Zeneca.

MAMMALIAN TOXICOLOGY

Acute oral LD₅₀ for male rats 2816, female rats 2146 mg/kg. **Skin and eye** Acute percutaneous LD₅₀ for rabbits > 5000, rats > 2000 mg/kg. Mild skin irritant; slightly irritating to eyes (rabbits). Mild skin sensitiser (guinea pigs). **Inhalation** LC₅₀ (1 h) for rats > 5.5 mg/l air. **NOEL** (90 d) for rats 20 mg/kg diet.

ECOTOXICOLOGY

Birds Five-day dietary LC₅₀ for mallard ducks 14,500, bobwhite quail > 10,000 mg/kg diet. **Fish** LC₅₀ (96 h) for rainbow trout 141 mg/l. **Daphnia** EC₅₀ (48 h) 161 mg/l.

ENVIRONMENTAL FATE

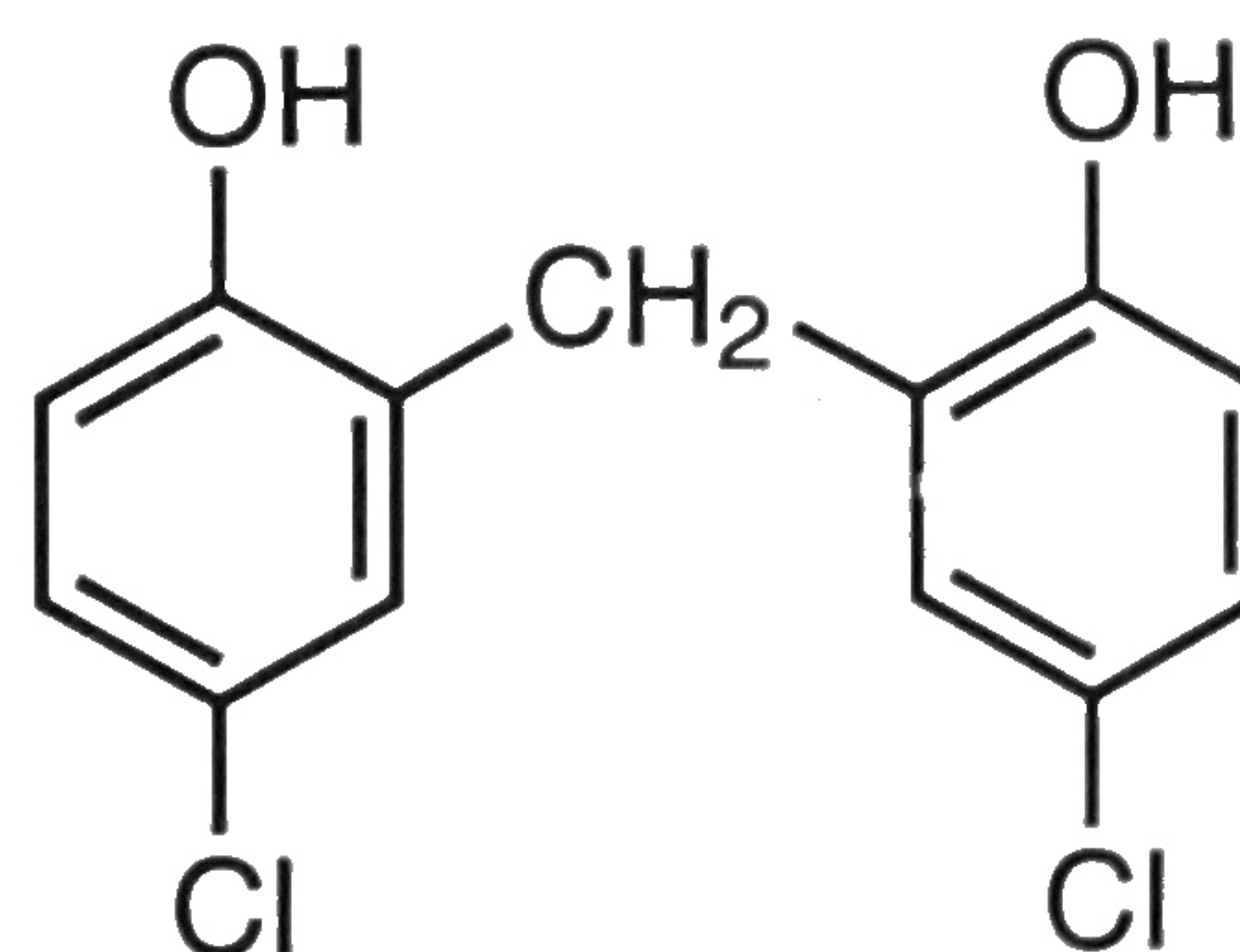
Animals For metabolism in rats, see J. B. Miallis *et al.*, *Chemistry and Mode of Action of Herbicide Antidotes*, p. 109. **Plants** For metabolism in maize, see *idem, ibid.*

Soil and water In soil DT₅₀ c.8 d (27-29 °C). For degradation in soil, see *idem, ibid.*

207 dichlorophen

Algicide Fungicide Bactericide

chlorophenol



NOMENCLATURE

Common name dichlorophen (BSI, E-ISO, BAN), dichlorophène ((*m*) F-ISO).

IUPAC name 4,4'-dichloro-2,2'-methylenediphenol.

C.A. name 2,2'-methylenebis[4-chlorophenol]. **CAS RN** [97-23-4]

Other names antiphen.

PHYSICO-CHEMICAL PROPERTIES

Mol. wt. 269.1 **Mol. formula** C₁₃H₁₀Cl₂O₂

Form Colourless, odourless crustals; (tech., light tan powder with a slight phenolic odour.

M.p. 177-178 °C; (tech., ≥ 164 °C) **V.p.** 13 nPa (25 °C) **Solubility** In water 30 mg/l