

TECHNICAL DATA SHEET OF

MANCOZEB + CYMOXANIL 72% WP

Chemistry identity	
Product name	Mancozeb + Cymoxanil 72% WP
IUPAC name	Mancozeb: manganese ethylenebis(dithiocarbamate) (polymeric) complex with zinc salt Cymoxanil: 1-(2-cyano-2-methoxyiminoacetyl)-3-ethylurea
CAS No	Mancozeb: 8018-01-7 Cymoxanil: 57966 - 95 - 7
Formula structure	<div style="display: flex; align-items: center; justify-content: space-around;"> <div style="text-align: center;"> $\left[\begin{array}{c} \text{S} \\ \\ \text{S} - \text{C} - \text{NH} - \text{CH}_2\text{CH}_2 - \text{NH} - \text{C} - \text{S} \\ \quad \quad \quad \\ \text{S} \quad \quad \quad \text{S} \end{array} \text{Mn}^{++} \right]_x \quad (\text{Zn})_y$ <p>x:y = 1:0.091</p> <p>Mancozeb</p> </div> <div style="text-align: center;"> $\begin{array}{c} \text{O} \quad \quad \text{O} \\ \quad \quad \\ \text{CH}_3\text{CH}_2\text{NH} - \text{C} - \text{NH} - \text{C} - \text{C} = \text{NOCH}_3 \\ \quad \quad \quad \\ \text{H} \quad \quad \quad \text{CN} \end{array}$ <p>Cymoxanil</p> </div> </div>
Physical and chemical properties	
Appearance	Solid
Content	Mancozeb 64%, Cymoxanil 8% min. (w/w)
pH	6.0~9.0
Density	NA
Solubility in water	Disperse in water
Mammalian toxicity	
Acute oral	LD ₅₀ >2000mg/kg
Acute dermal	LD ₅₀ for rats >2000 mg/kg.
Acute inhalation	LC ₅₀ (4 h) for rats >5.0 mg/L
Environment fate	<p>Mancozeb:</p> <p>Mancozeb breaks down rapidly in soil, sediment and water; terminal metabolites are natural products and with mineralisation to carbon dioxide. It does not bioaccumulate. Animals Poorly absorbed and rapidly excreted in animals. The spectrum of metabolites produced was similar in laboratory and farm animals, pointing to two common metabolic pathways, which both lead ultimately to the formation of glycine and to incorporation of the metabolites into natural products.</p> <p>Plants Extensively metabolised in plants, forming ethylenethiourea, ethylenethiuram monosulfide, ethylenethiuram disulfide and sulfur as transitory intermediates. Terminal metabolites are natural products, especially those derived from glycine. Soil/Environment Rapidly degraded in the environment by hydrolysis, oxidation, photolysis and metabolism. Soil DT₅₀ <1 d (ave., 20 ° C). Koc 998 ml/g (ave., 4 soils).</p> <p>Cymoxanil:</p> <p>Animals In rats, cymoxanil was readily absorbed through the intestines; the majority of the dose was excreted in the urine. The proposed metabolic pathway</p>

	involves hydrolysis of cymoxanil and then degradation to glycine. Plants Degraded to glycine with subsequent incorporation into natural products (proteins and starch). Soil/Environment In lab. soils, DT50 0.75–1.6 d (5 soils, pH range 5.7–7.8, o.m. 0.8–3.5%). In the field, DT50 (bare soil) 0.9–9 d. In aquatic studies, DT50 <1 d. Koc 38–237. Cymoxanil is mobile, adsorption Freundlich K 0.29–2.86 in four soil types.
Handling and storage	Handling: Avoid contact with skin, eyes and clothing; material may be an irritant. Storage: Store in a cool, dry, well-ventilated place. Do not use or store near heat, open flame or hot surfaces. Store in original containers only. Keep out of reach of children and animals. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.
Package	500g, 1kg, 25kg drum or customized package