

ISO common name	Ziram
Chemical name	Zinc bis(dimethyldithiocarbamate) (IUPAC);
	bis(dimethyldithiocarbamato) zinc (CA; 137-30-4)
Empirical formula	$C_6H_{12}N_2S_4Zn$
RMM	305.8
<i>m.p</i> .	246 °C
<i>v.p</i> .	Less than 10^{-5} Pa
Solubility	In water 1.56 mg/l at 25 °C; slightly soluble in
	diethylether and ethanol; moderately in acetone;
	soluble in carbondisulfide
Description	White odourless powder
Stability	Decomposed by acids
Formulations	Wettable powders, waterdispersible granules,
	suspension concentrates, dustable powders and paste

ZIRAM TECHNICAL *31/TC/M/-

1 Sampling. Take at least 100 g.

2 Identity tests.
2.1 CS₂ evolution. MT 153, CIPAC F, *p* 360
2.2 Identification of amines. MT 152, CIPAC F, *p* 357
2.3 Zinc. MT 154, CIPAC F, *p* 361

^{*} CIPAC method 1964; revised 1967. Prepared by the Dithiocarbamate Panel of PAC-GB; Chairman: H Crossley (The Murphy Chemical Co. Ltd.).

3 Ziram. As for maneb technical **61**/TC/M/3 omitting the initial treatment with tetrasodium EDTA, and except: *(c) Calculation*

Ziram content =
$$\frac{152.9 \times N \times (t-b)}{w}$$
 g/kg

4 Zinc. As for mancozeb 34/TC/M/4, CIPAC H, p 195

5 Arsenic. As for zineb technical **25**/TC/M/5.

ZIRAM WETTABLE POWDERS *31/WP/M/-

1 Sampling. Take at least 500 g.

2 Identity tests. As for ziram technical 31/TC/M/2.

3 Ziram. As for ziram technical 31/TC/M/3.

4 Zinc. As for mancozeb 34/TC/M/4, CIPAC H, p 195

5 Arsenic. As for zineb technical 25/TC/M/5.

6 Suspensibility. As for maneb wettable powders 61/WP/M/5 omitting the initial treatment with tetrasodium EDTA, and except: Mass of ziram in the 25 ml of suspension = $0.1529 \times N \times (t-b)$ g.

ZIRAM DUSTABLE POWDERS *31/DP/M/-

1 Sampling. Take at least 1 kg.

2 Identity tests. As for ziram technical 31/TC/M/2.

3 Ziram. As for ziram technical 31/TC/M/3.

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4 Zinc. As for mancozeb 34/TC/M/4, CIPAC H, p 195

5 Arsenic. As for zineb technical **25**/TC/M/5.

6 Dry sieve test. As for maneb dustable powders **61**/DP/M/5, omitting the initial treatment with tetrasodium EDTA and except: Mass of ziram in the residue = $0.1529 \times N \times (t-b)$ g

ZIRAM WATER DISPERSIBLE GRANULES *31/WG/M/-

1 Sampling. Take at least 500 g.

2 Identity tests. As for ziram technical **31**/TC/M/2.

3 Ziram. As for ziram technical **31**/TC/M/3.

4 Zinc. As for mancozeb 34/TC/M/4, CIPAC H, p 195

5 Arsenic. As for zineb technical 25/TC/M/5.

6 Suspensibility. As for MT 168 and ziram wettable powders 31/WP/M/6.

ZIRAM SUSPENSION CONCENTRATES *31/SC/M/-

1 Sampling. Take at least 1 l.

2 Identity tests. As for ziram technical **31**/TC/M/2.

3 Ziram. As for ziram technical **31**/TC/M/3.

4 Zinc. As for mancozeb 34/TC/M/4, CIPAC H, p 195

5 Arsenic. As for zineb technical 25/TC/M/5.

6 Suspensibility. As for MT 161, CIPAC F, *p* 394 and ziram technical **31**/TC/M/3 except that, if the presumed ziram is below 1.5 g then use standard iodine solution c $(1/2 I_2) = 0.05 \text{ mol/l.}$

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