

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION

R 275

ZINC OXYDE FOR PAINTS — I /
Specifications and methods of test

1st EDITION

November 1962

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Printed in Switzerland

Also issued in French and Russian. Copies to be obtained through the national standards organizations.

BRIEF HISTORY

The ISO Recommendation R 275, *Zinc Oxide for Paints*, was drawn up by Technical Committee ISO/TC 35, *Raw Materials for Paints, Varnishes and Similar Products*, the Secretariat of which is held by the Nederlands Normalisatie-Instituut (NNI).

Work on this question by the Technical Committee began in 1953 and led in 1958 to the adoption of a Draft ISO Recommendation.

In December 1958, this Draft ISO Recommendation (No. 266) was circulated to all the ISO Member Bodies for enquiry. It was approved, subject to some modifications of an editorial nature, by the following Member Bodies:

India	Poland
Israel	Romania
Italy	Spain
Japan	United Kingdom
Netherlands	U.S.S.R.

Six Member Bodies opposed the approval of the Draft:

Austria	Germany
Belgium	New Zealand
France	Sweden

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in November 1962, to accept it as an ISO RECOMMENDATION.

ZINC OXYDE FOR PAINTS**I/****1. SCOPE**

This ISO Recommendation defines the important requirements for zinc oxide for paints and the methods of test for these requirements. *

2. DEFINITION

Zinc oxide for paints is a white pigment which consists mainly of zinc oxide (ZnO).

3. REQUIRED CHARACTERISTICS AND THEIR TOLERANCES

Zinc oxide for paints should have the following characteristics:

Property	Type I	Type II	Type III	Type IV	Type V	Clause describing test method
Zinc oxide (ZnO) content %	min. 99.0	94.0 to 99.0	87.0 to 94.0	68.0 to 87.0	62.0 to 68.0	5.1
Lead content (lead compounds, expressed as lead, Pb) %	max. 0.3	0.3 to 3.0	3.0 to 8.0	8.0 to 22.0	22.0 to 27.0	5.2
Residue on sieve, max. %	0.1	0.1	0.3	0.3	0.3	5.3
Matter volatile at 105 °C, max. %	0.3	0.3	0.3	0.3	0.3	5.4
Loss on ignition at 500 °C, max. %	0.5	1.0	1.0	1.0	1.0	5.5
Matter soluble in water, max. %	0.5	1.0	1.5	1.5	1.5	5.6
Neutrality of the aqueous extract	Neutral to methyl red					5.7
Colour	To match that of the agreed sample					5.8
Lightening power	To be agreed between purchaser and vendor					5.9
Oil absorption						5.10
Hiding power						5.11

* For painting building interiors Convention No. 13 of the International Labour Organization limits the use of zinc oxides for paints to pigments containing less than 2% of lead.