

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 473

LITHOPONE

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BRIEF HISTORY

The ISO Recommendation R 473, *Lithopone*, was drawn up by Technical Committee ISO/TC 35, *Paints, Varnishes and Related Products and their Raw Materials*, the Secretariat of which is held by the Netherlands Normalisatie-instituut (NNI).

Work on this question by the Technical Committee began in 1950, taking into account the studies which had been made by the former International Federation of the National Standardizing Associations (ISA), and led in 1960 to the adoption of a Draft ISO Recommendation.

In April 1962, this Draft ISO Recommendation (No. 484) was circulated to all the ISO Member Bodies for enquiry. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies:

Austria	Italy	Romania
Burma	Japan	Spain
Canada	Netherlands	Sweden
Chile	New Zealand	Switzerland
Czechoslovakia	Portugal	United Kingdom
Germany	Republic of	U.S.S.R.
India	South Africa	Yugoslavia

Two Member Bodies opposed the approval of the Draft:

Belgium
France

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in February 1966, to accept it as an ISO RECOMMENDATION.

LITHOPONE

1. SCOPE

This ISO Recommendation establishes the more important requirements for lithopones and the methods of test for these requirements.

2. DESCRIPTIONS

2.1 Lithopone 30%. A white pigment consisting of zinc sulphide (ZnS) and barium sulphate (BaSO₄) in approximately molecular proportions. The material is a calcined co-precipitate.

2.2 Lithopone 60%.* A white pigment which contains approximately 60% zinc sulphide (ZnS) and a balance consisting mainly of barium sulphate (BaSO₄). The material is a calcined co-precipitate.

3. REQUIRED CHARACTERISTICS AND THEIR TOLERANCES

The lithopones should have the following characteristics:

Properties	Lithopone 30 %	Lithopone 60 %	Clause describing test method
Total zinc, calculated as zinc sulphide, min. %	28	58	5.1
Zinc oxide, max. %	1	1	5.2
Sum of total zinc, calculated as zinc sulphide and barium sulphate, min. %	99	99	5.1 and 5.2
Barytes	absent	absent	5.3
Matter volatile at 105 °C, max. %	0.5	0.5	5.4
Matter soluble in water, max. %	0.5	0.5	5.5
Alkalinity of the aqueous extract	equal to an agreed reference sample		5.6
Residue on sieve (63 µm), max. %	0.1	0.1	5.7
Colour	equal to an agreed reference sample		5.8
Lightening power	as agreed between purchaser and vendor		5.9
Hiding power			5.10
Oil absorption value			5.11

* There are on the market

- (1) lithopones with a content of about 40 or 50 per cent zinc sulphide. These products should be marked so as to indicate the zinc sulphide content,
- (2) barytes-reduced lithopones, which consist of mixtures of lithopones with higher zinc sulphide content and ground mineral barytes. These products should be marked so as to indicate the presence of barytes.