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### भारतीय मानक

## रोगनों, वार्निशों और सम्बद्ध उत्पादों के नमूने लेने और परीक्षण की पद्धतियाँ

भाग 8 वर्णकों और अन्य ठोसों के परीक्षण अनुभाग 3 भस्म मात्रा

(तीसरा पुनरीक्षण)

Indian Standard

# METHODS OF SAMPLING AND TEST FOR PAINTS, VARNISHES AND RELATED PRODUCTS

PART 8 TESTS FOR PIGMENTS AND OTHER SOLIDS

Section 3 Ash Content

(Third Revision)

UDC 667.612: 543.822

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BUREAU OF INDIAN STANDARDS MANAK BHAVAN, 9 BAHADUR SHAY ZAFAR MARG NEW DELHI 110002

#### **FOREWORD**

This Indian Standard was adopted by the Bureau of Indian Standards, after the draft finalized by the Paints (Other than Industrial Paints) and Allied Products Sectional Committee had been approved by the Chemical Division Council.

Methods of sampling and test for varnishes and lacquers were first published in 1952 as IS 197 and subsequently revised in 1969. During the third revision of IS 101, methods of sampling and test for paints, varnishes and related products the scope of the standard was enlarged to cover the methods of sampling and test of varnishes and lacquers also. The concerned Sectional Committee therefore decided to cover this test method under IS 101 so that all the test methods for paints and allied products are covered under one standard. This standard thus supersedes clause 16 of IS 197. This standard is one of series dealing with sampling and testing of paints, varnishes and related products.

In reporting the result of a test or analysis made in accordance with this standard, if the final value, observed or calculated is to be rounded off, it shall be done in accordance with IS 2: 1960 'Rules for rounding off numerical values (revised)'.

### Indian Standard

# METHODS OF SAMPLING AND TEST FOR PAINTS, VARNISHES AND RELATED PRODUCTS

#### PART 8 TESTS FOR PIGMENTS AND OTHER SOLIDS

Section 3 Ash Content

(Third Revision)

#### 1 SCOPE

This standard (Part 8/Sec 3) prescribes the method to determine the ash content of the packaged paint, varnish and related products.

#### 2 APPARATUS

- 2.1 Silica Crucible 50 m1 capacity.
- 2.2 Muffle Furnace capable to maintain 800°C.

#### 3 PROCEDURE

#### 3.0 Outline of the Method

It is determined by finding out the loss in mass of the material after igniting in a muffle furnace until all the carbonaceous matter is oxidized.

#### 3.1 Procedure

Take 10 to 25 ml of the material in a weighed silica crucible or dish and weigh again. Ignite

the material by playing the flame of a burner on its surface and allow it to burn quickly until most of the material has been incinerated. Transfer the crucible or dish to a muffle furnace at  $700 \pm 25^{\circ}\text{C}$  until all carbonaceous matter has been oxidized. Cool the crucible or dish in a desiccator and weigh till constant mass.

#### 3.2 Calculation

Calculate the percent of ash content as follows:

Ash, percent by mass = 
$$\frac{M_1 - M_2}{M} \times 100$$

where,

 $M_1 = \text{mass}$ , in g, of the dish and the sample;

 $M_2$  = mass, in g, of the dish and completely oxidized material; and

M = mass, in g, of the sample taken for the test.

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