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**COMPLIANCE & TESTING PROCEDURE FOR**  
**MEASUREMENT OF**  
**‘LEAD CONTENTS IN HOUSEHOLD**  
**AND DECORATIVE PAINTS’**



**CENTRAL POLLUTION CONTROL**  
**BOARD**  
*(Ministry of Environment, Forests & Climate Change)*  
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# **MEASUREMENT OF LEAD CONTENTS IN HOUSEHOLD AND DECORATIVE PAINTS**

## **OVERALL REQUIREMENTS**

### **1. Scope:**

This document lays down the applicability, requirements and Testing Procedure for notification vide G.S.R. 1030 (E), dated 1<sup>st</sup> November, 2016 on the regulation of Lead contents in Household and Decorative Paints, issued by the Ministry of Environment, Forests and Climate Change, Government of India.

Household and Decorative Paints means paint used as surface coating materials in interior and exterior of buildings, walls, civil structures, any consumer products meant for household purposes and shall include enamel, primer, interior, undercoating and finishing colouring materials as prescribed for Household and Decorative Paints by Bureau of Indian Standards.

### **2. Prohibition of Use of Lead or Exemption of Lead in Certain Cases**

Any manufacture, trade, import and export of Household and Decorative Paints as explained above containing lead or lead compounds (calculated as lead metal) in excess of 90 parts per million (0.009 per cent) of the weight of the total non-volatile content of the weight of the dried paints film is hereby prohibited.

All paints marked for industrial use which include automotive paints, protective & marine coatings, powder coatings, refinishing paints, road marking paints, waterproofing materials.

### **3. Self Certification**

Household and Decorative Paints manufactured or imported on or from the date these rules come into force i.e. 1.11.2017 shall be labelled "lead contents does not exceed 90 parts per million" or "lead contents does not exceed 90 mg/kg". Such labelling shall be durable and legible and

(i) The label shall contain the name and address of the manufacturer or importer, as the case may be;

(ii) The label shall contain the date of manufacture or import into the country, as the case may be;

(iii) The certification will be verified by NABL accredited & recognized by third party.

**a) Existing Paints**

For existing paints, manufacturer / importer shall mandatorily have to self-certify by labelling and shall submit the list of the household and decorative paints to Nodal Agency. Only these paints will be monitored by nodal agency for lead content compliance & shall submit the report to MoEF & CC. Multiple bases under one product category will be considered as single product.

**b) New Paints**

The rule (clause 9.2) says that the paint shall be pre-tested for lead conformity by certifying agencies before bringing it out to market & shall submit the report to MoEF & CC.

**4. Conformity Assessment of Existing and New Paints**

**a) Sampling Protocol**

- Sampling shall be done at random from factory premises or company authorized warehouses by unit /third party.
- Sample shall be drawn only for the paints as per the list of the household or decorative paints submitted by the manufacturer / importer.
- Three to five samples shall be drawn depending on the quantity of a particular batch. Two samples shall be retained at manufacturer / importer end for dispute resolution in the event of non-conformity and shall be retained for period of 03 months from date of drawing the sample.

- Samples drawn shall be divided in to two parts and kept in separate containers. One sample shall be retained at manufacture's premises for resolution in the event of non-conformity.

**b) Sampling Frequency**

Initial one time testing of all paints for conformity assessment shall be done. Thereafter, it shall be done at random annually for few samples.

**c) Protocol for Testing Products having Multiple Bases and Shades**

- For paints with multiple bases / multiple shades the composite sampling protocol shall be followed which shall be valid for complete range of product.
- It will not recommend for testing of tinted paints.
- Colorant samples shall be tested separately for lead. The samples of colorant shall be taken from the sealed container and not from the dispensing machine.

**5. Compliance Monitoring**

After first time, conformity assessment /self- certification of all paints, subsequent annual compliance monitoring shall be done by nodal agency only for few paints & submit the report to MoEF & CC.

**6. Dealing with Non-Conformity**

If any sample is found to be non-compliant then matter will be further evaluated by MoEF & CC. MoEF & CC shall again re-test the sample from same batch by third party.

**7. Time Period**

The overall lead time from drawing of sample to submission of report to manufacturer shall not exceed one month.

## **8. Nodal Agency for Implementation of Procedure**

- i) The Central Pollution Control Board shall be the nodal agency for implementation of these rules.
- ii) In case of any dispute or difficulty in implementation of these rules, the matter shall be referred to the nodal agency.
- iii) The nodal agency shall constitute a Committee to advise on all matters including the disputed matters, related to the implementation of these rules.

## **9. Authorised Agencies for Testing of Paints**

The Central Power Research Institute, Bengaluru and its regional centres at Bhopal, Guwahati, Hyderabad, Kolkata, Nagpur, Nashik and Noida and any other agency notified by the Ministry of Environment, Forest and Climate Change from time to time shall be authorised to carry out such tests.

## **10. Measurement Methods**

The measurement of lead content of paint will be carried out by WDXRF (Wavelength Dispersive X-Ray Fluorescence). In case, WDXRF is used for the first time assessment and results are found to be non-compliant then the re-testing of the same sample will be done by AAS/ICP which are as follows:

- a. ASTM E1645- Sample preparation from dried paint film by microwave digestion
- b. ASTM E1613- Determination of lead by ICP /AAS

## **11. Transitory Provision**

Household and Decorative Paints manufactured or imported before the date of commencement of these rules shall be permitted for sale for the next two years..