



## **IS 158 : 2015 Ready mixed paint, brushing, bituminous, black, acid, alkali and heat resisting - Specification (Fourth Revision)**

**Ready-mixed paint, brushing, bituminous, black, acid, alkali, and heat resisting** is a specialized coating formulated to protect surfaces exposed to harsh environments, including industrial and high-temperature conditions. This paint is characterized by its ability to resist chemical reactions with acids and alkalis, withstand heat without degradation, and provide durable protection against environmental factors such as moisture and corrosion. Its bituminous base and smooth, brushable consistency make it suitable for applications requiring strong adhesion and flexibility.

The Indian Standard IS 158: 2015 specifies the requirements and methods for sampling and testing ready-mixed, bituminous black paint designed for applications requiring resistance to acid, alkali, and heat. These paints are commonly used for protecting funnels, boilers, and apparatus connected with ammunition. However, they are not recommended for chimneys, which require specialized coatings.

This standard mandates that the paint composition must be an unpigmented bituminous base with a smooth and uniform consistency, ensuring suitability for brushing without appreciable drag. To address health concerns, especially regarding lead toxicity, the standard limits the maximum permissible lead content to 300 ppm.

Performance requirements outlined in the standard include a drying time of no more than eight hours to achieve a hard-dry state and a finish that is smooth and semi-glossy to glossy. The paint must also pass tests for flexibility, adhesion, and resistance to acid, alkali, heat, and condensation-induced corrosion. Additional specifications include a maximum volatile matter content of 55% by mass and a flash point not below 30°C, ensuring safety and durability under harsh conditions.

The standard requires that the paint containers be properly marked with details such as the name and type of the material, manufacturer information, batch number, manufacturing date, lead content, and cautionary notes about potential health hazards. Packaging must comply with the provisions of IS 1407 or IS 2552 and adhere to relevant safety regulations.

Compliance with IS 158: 2015 is ensured through rigorous testing methods covering drying time, opacity, flexibility, adhesion, and resistance to environmental factors. Products conforming to this standard must display the BIS Standard Mark, which serves as a guarantee of quality and safety, particularly for applications in defence and other critical industries.