



IS 12744 (Part 1) : 2013 - Ready mixed paint, air drying, red oxide - zinc phosphate, priming - Specification : Part 1 for domestic and decorative applications (First Revision)

Paint serves two primary purposes in the built environment:

1. Protection: Paint acts as a barrier against various environmental factors, such as:

- Weathering (rain, sunlight, heat)
- Corrosion (rust, oxidation)
- Wear and tear (scratches, fading)
- Moisture damage

2. Decoration: Paint enhances the aesthetic appeal of a space, allowing for:

- Color scheme and design expression
- Texture and finish variations
- Branding and identity representation
- Ambiance and mood creation

These dual functions make paint a fundamental component in architecture, interior design, and construction.

Ready mixed paint, air drying, red oxide - zinc phosphate, priming - Specification : Part 1 for domestic and decorative applications (IS 12744 (Part 1) : 2013) this standard was first published in 1989. This specification was formulated keeping in view the increased trend of the use of zinc phosphate based primers as anti-corrosive primer in place of zinc chrome pigment, in view of health hazards associated with the production of chrome pigments. It was found by experimental results that when based on good quality medium and extender, the composition gives a matching anti-corrosive performance to zinc chrome.

The Committee observed that this paint have dual applications, namely usage for household/decorative purposes and usage for industrial/commercial applications. Keeping this in perspective, the Committee decided to bifurcate the existing specification into two parts namely Part 1 of the standard for household/decorative purposes and Part 2 of the standard for commercial/industrial applications

The Committee observed that this primer is used for protection of grill, gates, window frames (Metal), etc, in houses and buildings and it is technologically feasible to formulate this product with very low maximum permissible limit of lead. Therefore, in this standard, lead restriction up to a maximum permissible limit of 90 ppm has been prescribed keeping in view to use this product for painting in houses and buildings. This is more so to prevent lead exposure of children and adults in consumer homes/ residential premises and consequent adverse impact on human health and safety and also keeping in view of the further scope for exposure to children to the paint once dried.

This standard (IS 12744 (Part 1) : 2013) prescribes the requirements and methods of sampling and test for the material commercially known as ready mixed paint, red oxide zinc phosphate, priming. The material is suitable for use, as a primer in the painting system for the protection of steel work, both under marine and inland outdoor conditions and for household/decorative purposes.