



Kesari Steel Shield is a specially formulated, single-component, ready-to-use, water-based polymeric alkaline protective coating designed explicitly for anti-corrosion protection on steel re-bars during structural repairs and newly manufactured TMT rods.

1 Product Technical Specifications

Technical Parameter	Specification Value & Standard
Chemical Type	Single-component aqueous polymeric alkaline liquid
Appearance / Color	Aqueous green liquid
Specific Gravity	1.1 ± 0.02 g/cc
Finish	Semi-matt
Salt Spray Resistance	Passed 750 hours
Coverage	40 to 50 sq. ft. per Kg
Packaging Size	1 kg and 5 kg containers
Shelf Life	12 months in ideal storage conditions

2 Key Features & Recommended Applications

- **Key Advantages:** Ready-to-use, single-component water-based formulation (non-toxic); long-term corrosion resistance forming a tough, hard protective film on steel re-bars; excellent adhesion between treated TMT bars and concrete or polymer-modified mortar (PMM); passes bend tests and provides high abrasion resistance.
- **Recommended Applications:** Anti-corrosion protective coating on exposed re-bars during RCC structural repairs; protective coating on newly manufactured TMT steel rods.

3 Complete Application Protocol

Step 1: Substrate & Steel Preparation

- **Surface Cleaning:** Ensure all steel substrates are completely clean and free from dust, laitance, plaster oil, paint, and foreign corrosion deposits.
- **Rust Removal:** Mechanically remove loose rust using wire brushing, chipping, hammering, or grinding until the majority of the rust scale is eliminated.

Step 2: First Coat Application

- Stir the Kesari Steel Shield liquid thoroughly before use.
- Apply the **first coat** evenly using a brush or spray directly onto the dry, prepared steel surface.
- Allow it to dry completely for **1 to 2 hours** (surface dry takes less than 45 minutes under ambient conditions). *Note: Do not thin with plain water unless specified.*

Step 3: Second Coat Application

- Inspect the first coat for any pinholes, gaps, or discontinuities.
- Apply a **second coat** to cover any missed spots or discontinuities once the first layer is dry.
- Allow the entire coating system to achieve a hard dry state (less than 12 hours) before casting concrete or applying repair mortar.

4 Storage & Safety Precautions

- **Storage:** Store in cool, dry conditions in original unopened containers, protected from direct sunlight. Keep out of reach of children.
- **Health & Safety:** Handle with care using recommended personal protective equipment (PPE) such as hand gloves, safety goggles, and masks. In case of contact with eyes or skin, rinse immediately with plenty of soap and cold water, and seek medical attention if irritation develops.