GranBond

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Water-Based Low-Odor Grey Primer(SX-1001)
Technical Data Sheet（TDS）

Water-Based Low-Odor Grey Primer
Product Number：SX-1001
Product Type：Water-Based Eco-Friendly Primer

1.Product Description

This product is a high-performance waterborne eco-friendly primer, formulated with waterborne modified acrylic resin as the base material, combined with environmentally friendly additives and anti-corrosive pigments.
It uses water as the diluent, producing no irritating odor during application. The coating features fast drying, strong adhesion, and serves as an ideal alternative to conventional solvent-based primers.

2. Main Applications

· Suitable as an anti-corrosive primer for indoor and outdoor steel surfaces such as general steel structures, machinery, pipelines, and tank exteriors.
· Suitable for interior coating of ship compartments, truck bodies, special containers, and storage boxes.
· Compatible with waterborne topcoats (such as waterborne acrylic and waterborne polyurethane systems).

3.Key Performance Features

- **Low Odor & Environmentally Friendly**: Uses water as the diluent, with very low VOC content. No irritating odor during application and drying.
- **Excellent Adhesion**: Provides strong adhesion to substrates such as steel and aluminum.
- **Anti-Corrosion Performance**: Contains environmentally friendly anti-rust pigments, offering effective substrate protection.
- **Fast Drying**: Quick surface drying at ambient temperature, helping to shorten the overall coating cycle.
- **Easy Application**: Viscosity can be adjusted with water; tools are easy to clean.

Technical Parameters：

Item	Specification	Test Standard / Method
Color	Grey (customizable)	Visual comparison
Gloss (60°)	≤30 GU	ASTM D523
Volume Solids	65% ± 2%	ISO 3233
Density	Approx. 1.25 kg/L	ASTM D1475
Mixing Ratio	Single component, stir evenly before use	—
Typical Dry Film Thickness	40–60 μm	—
Theoretical Coverage (based on 50 μm DFT)	Approx. 8.2 m²/kg	—
VOC Content	≤50 g/L	EPA Method 24
Flash Point	Not applicable (waterborne)	—
Drying Time (25°C,	Surface dry: ≤30 min; Hard dry: ≤8	ASTM D1640

50% RH)	h; Full cure: 7 days	
Recoat Interval (25°C)	Min: 2 h; Max: Unlimited (after proper surface cleaning)	—

4.Application Instructions

- **Primer**: SX-1001 Waterborne Low-Odor Grey Primer (this product)
- **Topcoat**: Waterborne acrylic topcoat / Waterborne polyurethane topcoat / Waterborne alkyd topcoat
- **Typical Film Thickness System**: Primer 40–60 μm + Topcoat 40–60 μm (two coats)

5.Surface Preparation

Item	Requirement
Degreasing / Oil Removal	Use a dedicated cleaning agent or solvent to thoroughly remove oil, grease, and dust from the substrate surface, then rinse clean with fresh water.
Rust Removal	Abrasive blasting to Sa2.5 grade (ISO 8501-1), or power tool cleaning to St3 grade.
Surface Condition	Clean, dry, free of oil contamination, rust scale, and dust.
Note	The substrate temperature must be at least 3°C above the dew point and not lower than 5°C.

6.Application Guidelines

Item	Requirement
Mixing	Stir the paint thoroughly using a power mixer. No curing agent is required. If dilution is needed, use clean water.
Pot Life	Not applicable.
Thinner	Clean water.
Thinning Ratio (by paint volume)	Airless spray: 0–5%; Air spray: 10–15%; Brush/Roller: 0–5%.
Airless Spraying	Nozzle size: 0.33–0.43 mm; Pressure: 10–15 MPa.
Air Spraying	Nozzle size: 1.0–1.5 mm; Pressure: 0.2–0.4 MPa.
Brush/Roller Application	Suitable for small-area repairs and edges/corners. Ensure even coating and avoid missed spots.

7.Safety and Precautions

- This product contains organic solvents. Ensure good ventilation during application and wear appropriate protective equipment such as safety goggles, respirators, and protective gloves.
- If the coated surface is contaminated (oil, water, dust), remove it with a stiff brush or light sanding, and clean thoroughly.
- It is recommended to conduct a small-area adhesion test before application. Proceed with large-scale application only after confirming satisfactory results.
- Application conditions: Temperature above 5°C; relative humidity below 85%; substrate temperature at least 3°C above the dew point.
- Avoid application under high temperature, direct sunlight, or strong wind, as rapid solvent evaporation may affect leveling and adhesion.
- Clean tools and equipment immediately after use with the recommended thinner.

8.Packaging, Storage and Shelf Life

- **Packaging**: Main paint: 20 kg/drum (approx. 17.4 L, calculated based on a density of 1.15 kg/L).
- **Storage Conditions**: Store in a cool, dry, and well-ventilated place, away from sources of ignition. Avoid high temperatures and direct sunlight. Recommended storage temperature: 5–35°C.
- **Shelf Life**: 12 months (unopened).

Disclaimer：
All information provided in this Technical Data Sheet is based on our typical test data and experience. Actual performance may vary depending on application conditions, substrate preparation, and application methods. It is recommended to conduct a small-scale trial or consult our technical personnel before use. We reserve the right to modify the technical data without prior notice.

Technical Data Sheet

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