



Let the world never fade

Eco-Friendly Epoxy Thinner (HY-301X)

Product Data Sheet (TDS)

Eco-Friendly Epoxy Thinner

Product Number: (HY-301X)

Product Type: Thinner

1. Product Description

This product is a high-performance, eco-friendly epoxy thinner, specially designed for various epoxy resin coatings, including epoxy zinc-rich primers, epoxy intermediate coatings, and epoxy micaceous iron oxide (MIO) coatings. It is used to adjust application viscosity and for cleaning tools.

Formulated with carefully selected low-odor solvents and additives, it features strong solvency, moderate evaporation rate, and excellent compatibility with epoxy systems. It produces low odor during application, helping to improve the working environment.

2. Main Applications

- Used for viscosity adjustment of epoxy coatings such as epoxy zinc-rich primers, epoxy intermediate coatings (HY-02G), and epoxy micaceous iron oxide (MIO) intermediate coatings (HY-01G).
- Suitable for thinning in various application methods, including airless spray, conventional spray, brushing, and rolling.
- Used for cleaning spray equipment, tools, and containers after use.

3. Key Performance Features

- **Eco-Friendly & Low Odor:** Formulated with low-odor raw materials, producing minimal irritation during application and drying; meets environmental protection requirements.
- **Strong Solvency:** Provides excellent solubility and compatibility with epoxy resin systems; no precipitation or gelling.
- **Moderate Evaporation:** Optimized evaporation rate ensures no adverse effect on flow and film formation of epoxy coatings.
- **Safe & Stable:** High flash point and good storage stability; resistant to deterioration.
- **Easy Cleaning:** Effectively dissolves uncured epoxy coatings, facilitating cleaning of tools and equipment.

Technical Parameters:

Item	Specification	Test Standard / Method
Appearance	Colorless, transparent liquid, free of mechanical impurities	Visual
Density	Approx. 0.88 ± 0.02 kg/L	ASTM D1475
Flash Point (closed cup)	≥28°C	ISO 3679 / ASTM D93
VOC Content	≤750 g/L	EPA Method 24 / ISO 11890-2
Thinning Capability (with epoxy coatings)	Completely miscible; no flocculation or precipitation	Internal method
Moisture Content	≤0.1%	ASTM E203
Benzene Content	≤0.01% (detection limit)	GC/MS method
Odor Level	Low odor (2/5)	Internal sensory evaluation

4. Application Guidelines

- **Timing of Addition:** Add the thinner slowly while stirring the coating before use, according to the recommended ratio.
- **Recommended Dosage (for reference):**
 - Airless spray: 10–20%
 - Conventional spray: 20–40%
 - Brushing / rolling: 0–10%*(Refer to the coating's TDS and actual performance for final adjustment.)*
- **Mixing Method:** Stir thoroughly after addition, then allow to stand for 5–10 minutes to release entrapped air before application.
- **Cleaning Use:** Can be used directly as supplied or with excess thinner for soaking and cleaning tools and spray equipment.

5. Safety and Precautions

- This product is a flammable liquid. Keep away from open flames, heat sources, and sparks during storage and use. Smoking is strictly prohibited.
- Ensure good ventilation at the application site. Wear protective gloves, safety goggles, and a respirator.
- Avoid direct skin contact and inhalation of vapors. In case of contact, rinse thoroughly with plenty of water; seek medical attention if necessary.
- Do not mix with water. Store in the original tightly sealed container and protect from moisture.
- Dispose of used thinner and cleaning waste in accordance with local environmental regulations.
- This product is intended for epoxy coating systems only. A compatibility test is recommended before use with other systems.

6. Packaging, Storage and Shelf

- **Packaging:** 18 kg per drum (approx. 20.5 L) and 180 kg per drum (approx. 204.5 L) (based on a density of 0.88 kg/L)
- **Storage Conditions:** Store in a cool, dry, and well-ventilated place, away from fire sources and oxidizers. Avoid 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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