

Technical Data Sheet

Farapol Jam Chemical Indus. Co.

FARAPOL V 305

Product Description Farapol V 305 is a modified epoxy vinyl ester resin, which is particularly designed for use as a primer for lining concrete, carbon steel, stainless steel and FRP substrate. The inherent resilient property provides exceptional higher elongation, i.e. increased flexibility, excellent adhesion and resistance to severe mechanical stress.

Applications and Use Farapol V 305 is a modified Bis-phenol A based Epoxy Vinyl Ester Resin Primer designed for use as a primer for lining concrete, carbon steel, stainless steel and FRP substrate.

Certificates and Approvals Farapol Jam Chemical Industrial Company carries out the production, quality control, and distribution of this resin in compliance with ISO 9001, 14001, 45001, 10002, 10004, 10015, and 17065 standards. If the resin is properly formulated and cured, it can meet US FDA regulations 21 CFR 177.2420.

Typical Liquid Resin Properties

<i>Property @ 25 °C</i>	<i>Unit</i>	<i>Specification</i>	<i>Method</i>
Viscosity Brookfield ¹	cps	250 - 350	ISO 2555
Solid Content	%	50 - 54	ISO 3251
Color	Gardner	Max 2	ASTM D 1544
Specific Gravity	relative	1.10-1.11	ISO 2811
Gel Time ¹	minute	17 - 21	ASTM D 2471
Exothermic Peak Temperature	°C	150-180	ASTM D 2471

1) Gel Time and Viscosity can be adjusted as per customer requirements.

Gel Time Behavior of Resin²

<i>Temperature (°C)</i>	<i>18</i>	<i>25</i>	<i>30</i>
<i>Gel Time (minute)</i>	27-32	17-21	9-12

2) Gel time measuring formulation used: 1.0 phr Cobalt Octoate (1.0%), 0.7 phr DMA (10%) - Catalyst: 1.0 phr Akperox (A60)

NOTICE IN USE

1. If FARAPOL V 305 is blended with cobalt octoate promoters, the shelf life will be shortened. Promoted FARAPOL V 305 must be used within 2 weeks.
2. Before applying FARAPOL V 305, it is advised to remove the loose material, rust and dirt by sand-blast in order to achieve maximum adhesion. The metal surface should achieve Sa 2 ½ (white metal).
3. In case of high humidity (85%), it is recommended to increase the MEKP usage (by 0.1phr or higher depending on operations) for a better cure. Fine-tuning MEKP usage rate is able to give the best performance of FARAPOL V 305 even when the humidity is high.
4. FARAPOL V 305 should be applied within 8 hours after sandblast. Careful check is required to make sure the substrate surface is free of dust, dirt and grease which will reduce adhesion.
5. After FARAPOL V 305 is applied onto the substrate, the laminate should be constructed between 4 hours and 7 days. If it becomes tacky-free, the surface should be roughed before laminating resin is to be applied.
6. FARAPOL V 305 will appear as a two-phase liquid in storage. Thorough mixing again is required to have maximum performance.
7. The gel time of FARAPOL V 305 is affected primarily by catalyst concentration and temperature. The variations in cure characteristics may be caused by the variations in catalyst, humidity, pigment, fillers and other additives. It is recommended that the fabricators check the cure characteristics with a small quantity of resin before proceeding with bulk production.
8. FARAPOL V 305 contains an organic solvent (styrene). Keep away from heat, sparks and flames.
9. FARAPOL V 305 is a potentially reactive chemical. Please store it in the dark and keep it away from heat and direct sunshine.
10. Containers, not completely emptied must be closed immediately after use.

Handling, Storage and Stability

FARAPOL V 305 is a product sensitive to temperature, Light, and oxidation. Hence, it should be stored indoors in a dry place at a temperature between 5 and 25°C. Keep always in the original, unopened, and undamaged containers. Avoid keeping material exposed to sunlight. On storage under the conditions mentioned above, the shelf life for FARAPOL V 305 is 3 months.

Healthy and Safety

Avoid storing the resin along with Metallic Driers and Peroxides in the same area. Safety Datasheets of the product are available on demand. The user is responsible to familiar with the material handling and safety datasheet before using the product.

Packaging

Farapol V 305 is supplied in 20 Kg bucket and 200 Kg steel barrels.

Notice

The information contained herein is provided in good faith and is to the best of our knowledge accurate, but we assume no liability for its accuracy or completeness. Therefore, the buyer is advised to determine the suitability of this product for the intended use. We retain the right to make any changes according to technological progress or further developments.

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