



THIXON™ P-6-EF

Description THIXON™ P-6-EF is a vulcanizing adhesive primer used with all MEGUM™ or THIXON™ cover coat adhesives to bond rubber compounds to rigid substrates.

Benefits & Features Due to its unique chemical attributes, it can be used in more environmentally stringent applications where water, glycol-water, glycol and elevated temperature cause issues with standard rubber to metal primer systems.

| Uncured Properties | Nominal Value | Unit | Test Method |
|-----------------------------------|----------------|-------------------|-------------|
| Color | Grey | | |
| Solids Content | | | |
| -- ¹ | 13 | % | |
| -- ² | 23 to 29 | % | ISO 3251 |
| Density | 0.920 to 0.980 | g/cm ³ | ASTM D1475 |
| Dry Film Density | 2.1 | g/cm ³ | |
| VOC Content | 5.85 | lb/gal | |
| Flash Point ³ | 16.0 | °C | |
| Viscosity | | | |
| 25°C ⁴ | 25 to 55 | sec | |
| 25°C ⁵ | 50 to 300 | sec | ASTM D2196 |
| Theoretical Coverage ⁶ | 28.3 | m ² /l | |
| Recommended Film Thickness | 7.5 | µm | |
| Recommended Film Thickness Range | 5.0 to 10 | µm | |
| Shelf Life ⁷ (25°C) | 9 | month | |

Elastomer

This material is typically a primer coat for good environmental resistance under THIXON™ and MEGUM™ Cover and OSN-2 type coats. In special cases, this material can be used as a one-coat bonding system for high durometer natural, styrene-butadiene and chloroprene rubbers.

Substrate

Will bond various metals including hot and cold rolled steel, stainless steel alloys, brass, aluminum and zinc plated metals. Along with metals pre-treated with zinc, manganese and iron phosphate. In addition, it can be used for bonding rubber to fibers such as rayon, polyester and nylon.

Surface Prep

Review Dow 's rubber-to-substrate bonding agent application guide or contact your account manager.

Mix Instructions

Diluents - Toluene, xylene or a blend made of 80% toluene and 20% MIBK. Other blends of aromatics and ketones are possible, contact your Dow TS&D representative.

First, thoroughly mix THIXON™ P-6-EF with a high speed propeller-type agitator. If diluting, slowly add the diluents to the adhesive while mixing constantly. Otherwise, the polymer base may precipitate from solution.

Continue to mix THIXON™ P-6-EF while spraying or dipping to keep the dispersed solids from settling to the bottom. This will assure that a homogenous mixture of the adhesive is applied.

- 1 part adhesive: 0 part diluent - estimate 26.0% theoretical solids
- 1 part adhesive: 0.1 part diluent - estimate 23.6% theoretical solids
- 1 part adhesive: 0.25 part diluent - estimate 20.8% theoretical solids
- 1 part adhesive: 0.5 part diluent - estimate 17.3% theoretical solids
- 1 part adhesive: 0.75 part diluent - estimate 14.9% theoretical solids
- 1 part adhesive: 1.0 part diluent - estimate 13.0% theoretical solids
- 1 part adhesive: 1.5 part diluent - estimate 10.4% theoretical solids
- 1 part adhesive: 2.0 part diluent - estimate 8.7% theoretical solids

Application Technique

Brushing: use product undiluted. To obtain the required film thickness, brush on a heavy wet film without brushing excessively.

Dipping: dilute 5 parts product with 1 part diluent, to obtain a dry film thickness of 0.3 to 0.5 mil.

Spraying: for spray applications, dilute product with diluents to obtain a viscosity of 18 to 21 seconds (#2 G.E. Zahn cup).

Drying the Film

The drying time is approximately 45 to 60 minutes at room temperature. At lower temperatures, dry longer. The drying time can be shortened by force drying five minutes at 82°C (180°F). Do not dry at temperatures above 120°C (250°F).

Molding and Curing

Can be used with all common molding and curing methods. Cure temperatures between 100°C and 204°C (212 and 400°F) are recommended.

Pre-Bake Resistance

Coated inserts can be pre-baked for up to 5 minutes at 163°C (325°F) without adversely affecting bond quality.

Dry Film Stability

Excellent dry film stability. Inserts coated with product can be stored for several weeks if protected from contaminants.

Clean-up

Equipment clean up should be done using recommended dilution solvents.

Packaging/Sizes Available

Drums, pails and cans.

Storage & Stability

The shelf life of this material is assured for 12 months (from the date of manufacture) at temperatures below 78°F in an unopened container.

Toxicity and Safety Information

Read the Safety Data Sheet before using this material. Toxicity and safety information is included in the SDS.

Food Contact Applications

Dow Automotive products are not approved for direct or indirect food contact or drinking water applications. If your applications include food contact or drinking water requirements, please contact your Dow representative. For more information on the regulatory status of this product, please refer to the SDS for this product.

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

¹ By volume

² Non-volatile solids by weight, 1 g/100°C/2 hour

³ Seta Closed Cup

⁴ ASTM D4212

⁵ Brookfield RV#1 spindle @ 50 RPM, 25°C

⁶ Applied at a dry film thickness of 0.2 to 0.4 mils

⁷ Unopened

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Additional Information

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|----------------------|------------------|---------------------------|----------------|
| North America | | Europe/Middle East | +800-3694-6367 |
| U.S. & Canada: | 1-800-441-4369 | | +31-11567-2626 |
| | 1-989-832-1426 | Italy: | +800-783-825 |
| Mexico: | +1-800-441-4369 | | |
| Latin America | | South Africa | +800-99-5078 |
| Argentina: | +54-11-4319-0100 | | |
| Brazil: | +55-11-5188-9000 | | |
| Colombia: | +57-1-219-6000 | Asia Pacific | +800-7776-7776 |
| Mexico: | +52-55-5201-4700 | | +603-7965-5392 |

www.dowautomotive.com

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