

THIXON™ 550

Description THIXON™ 550 is a cover coat adhesive used with THIXON™ adhesive primers for bonding EPDM, NR, HNBR, NBR, CR, IIR, and SBR compounds during vulcanization. Can also be used as a single coat adhesive for bonding synthetic elastomers to cord or fiber.

Benefits &
FeaturesDesigned for hard to bond EPDM rubber compounds along with RFL treated synthetic fibers. See your Dow
Automotive Systems Specialty Adhesive Technical Service Specialist for more details.

Uncured Properties	Nominal Value	Unit	Test Method
Color	Black		
Solids Content			
1	13	%	
2	16 to 19	%	ASTM D2369
Density	0.899 to 0.929	g/cm³	ASTM D1475
Dry Film Density	1.3	g/cm³	
VOC Content	6.40	lb/gal	
Flash Point	4.00	°C	DIN 53213
Viscosity ³ (25°C, Brookfield RVT)	0.20 to 0.80	Pa·s	ASTM D1084
Viscosity (25°C)	69 to 72	sec	Zahn Cup 3
Theoretical Coverage ⁴	9.30	m²/l	
Recommended Film Thickness	20	μm	
Recommended Film Thickness Range	13 to 30	μm	
Shelf Life ⁵ (25°C)	12	month	

Elastomer

NR, IR, SBR, BR, EPDM, IIR, CR, NBR, etc.

Substrate

CRS, SS, Cu, Brass, Zn and Mg Alloys with a THIXON[™], MEGUM[™] or ROBOND[™] Primer. This system can be used as a 1-coat bonding system where synthetic fibers treated with RFL treatment has been applied for belting and hose applications

Surface Prep

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

Mix Instructions

Diluents - Aromatic solvents, such as toluene or xylene

Product may appear thick or gelled when opened. May require heat or shear to reduce the viscosity for use.

First, thoroughly mix THIXON[™] 550 with a high speed propeller-type agitator. If diluting, slowly add the diluents to the adhesive while mixing constantly.

Continue to mix or re-circulate, while dispensing THIXON[™] 550 from its application reservoir to keep the dispersed solids from settling to the bottom. This will assure that a homogenous mixture of the adhesive is applied.

Application Technique

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

Dipping: dilute 1 part product with 0.0 - 1.0 parts diluent.

Spraying: dilute 1 part product with 0.4 - 1.0 parts diluent.

Drying the Film

The drying time is approximately 30 minutes at $16^{\circ}-27^{\circ}C$ ($60^{\circ}-80^{\circ}F$). At lower temperatures, dry longer. The drying time can be shortened by force drying five minutes at $82^{\circ}C$ ($180^{\circ}F$). Do not dry at temperatures above $121^{\circ}C$ ($250^{\circ}F$).

Molding and Curing

Can be used with all common molding and curing methods. Use a cure temperature between 121 - 232°C (250 - 450°F).

Pre-Bake Resistance

Coated inserts can be pre-baked for up to 5 minutes at 160°C (320°F) without adversely affecting bond quality.

Dry Film Stability

Excellent dry film stability. Inserts coated with product can be stored for several months 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 6 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
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² Non-volatile solids by weight

³ Spindle #3, @ 100 RPM

⁴ Applied at a dry film thickness of 0.6 mil

⁵ Unopened

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