



THIXON™ 423 Clear

Description THIXON™ 423 Clear is a vulcanizing adhesive which can be used as a one-coat adhesive or as a covercoat adhesive over THIXON™403/404 adhesive primer for bonding castable polyurethane to various substrates. THIXON™423 can also be used as a one-coat adhesive for bonding thermoplastic polyurethanes to metal. THIXON™423 can also be used as a protective coating for metal, polyurethane, epoxy, polyester and fiberglass compounds.

Benefits & Features Good one-coat system for Thermoplastic Urethane to metal bonding with better heat resistance than THIXON™ 405.

Uncured Properties	Nominal Value	Unit	Test Method
Color	Blue		
Solids Content			
-- 1	20	%	
-- 2	23 to 26	%	ASTM D2369
Density	0.923 to 0.947	g/cm ³	ASTM D1475
Dry Film Density	0.95	g/cm ³	
VOC Content	5.10	lb/gal	
Flash Point ³	-4.00	°C	
Viscosity ⁴ (25°C, Brookfield RVT)	0.18 to 0.40	Pa·s	ASTM D1084
Viscosity (25°C)	19	sec	Zahn Cup 3
Theoretical Coverage ⁵	18.5	m ² /l	
Recommended Film Thickness	15	µm	
Recommended Film Thickness Range	15 to 50	µm	
Shelf Life ⁶ (25°C)	24	month	

Elastomer

Castable Urethanes with the use of THIXON™ 403/404 primers or Thermoplastic Urethane (TPU)

Substrate

CRS, Phosphate or grit blast pre-treated CRS, Aluminum, Stainless Steel, fiberglass, polyester, nylon, rayon fibers, etc.

Surface Prep

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

Mix Instructions

Diluent - PM acetate, or THIXON™ 917 solvent blend should be mixed into THIXON™ 423 Blue to ensure consistent and uniform coating color.

Application Technique

Brushing: for brush applications use undiluted. Brush on a heavy wet film of THIXON™ 423 without brushing excessively. To obtain the required film thickness, brush on two coats. Dip - For dip applications, dilute 3 parts THIXON™ 423 with 1 part diluent. To obtain a film thickness of 1 mil, dip twice.

Drying the Film

Dry the film of THIXON™ 423 before continuing. At normal room temperature, dry for 30 to 45 minutes. At lower temperatures, dry longer. The drying time can be shortened by force drying approximately 5 to 10 minutes at 120 to 160°F. Do not dry at temperatures above 180°F.

Molding and Curing

Most molding and curing methods. Use a cure temperature between 190 to 350°F.

Pre-Bake Resistance

For the best results, prebake the coated metals for ½ to 3 hours at 200 to 300°F, depending on the weight of the metal. This product can withstand prebaking in forced air convection ovens, with proper ventilation, for up to 16 hours at 250°F.

Dry Film Stability

Excellent dry film stability. Inserts which have been coated can be stored for several weeks before use, if they are protected from airborne contaminants.

Clean-up

Equipment clean up should be done using recommended dilution solvents.

Packaging/Sizes Available

Drums, pails and gallon cans.

Storage & Stability

The shelf life of this material is assured for 24 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

³ SetaFlash Closed Cup

⁴ Spindle #1, @ 20 RPM

⁵ Applied at a dry film thickness of 15 microns/0.6 mils

⁶ Unopened

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