MEGUM™ 3290-1LD

Description

MEGUM™ 3290-1LD is a vulcanizing adhesive that can be used as a one-coat adhesive for the bonding of fluorocarbon rubbers to metals and other solid materials under vulcanization conditions. Suitable for all common curing systems including bisphenolic and peroxide curing. Gives an outstanding resistance to external influences and high temperatures, and may be used with all conventional vulcanization methods.

Benefits & Features

Rubber to substrate bonding system with more aggressive cross-linking chemistry to give good environmental resistance in the finished good.

Uncured Properties	Nominal Value	Unit	Test Method
Color	Clear/Yellow Tint		
Solids Content			
-- [1]	4.2	%	
-- [2]	7.0 to 8.0	%	ASTM D2369
Density	0.827 to 0.851	g/cm³	ASTM D1475
Dry Film Density	1.1	g/cm³	
VOC Content	6.32	lb/gal	
Flash Point [3]	13.0	°C	DIN 53213
Viscosity [4] (20°C, Brookfield RVT)	1.0E-3 to 3.0E-3	Pa·s	ASTM D1084
Theoretical Coverage [5]	76.0	m²/l	
Recommended Film Thickness	0.20	µm	
Recommended Film Thickness Range	0.10 to 0.30	µm	
Shelf Life [6] (25°C)	24	month	

Elastomer

FKM, AEM and Bisphenol and diamine cured FKM compounds and diamine cured AEM and ACM.

Substrate

CRS, Phosphate pre-treated CRS, Aluminum, Stainless Steel, etc.

Surface Prep

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

Mix Instructions

Diluents - Ethanol

First, thoroughly mix MEGUM™ 3290-1LD with a high speed propeller-type agitator. If diluting, slowly add the diluent to the adhesive while mixing constantly. Otherwise, the polymer base may precipitate from solution.

Recommended dilution is 1 part product to 3 parts diluent; however, a dilution study using customer rubber compounds and substrate preparation will determine ultimate dilution and concentration of this bonding agent.

1 part adhesive: 0 part diluent - estimate 7.4% theoretical solids
1 part adhesive: 0.5 part diluent - estimate 4.9% theoretical solids
1 part adhesive: 0.75 part diluent - estimate 4.2% theoretical solids
1 part adhesive: 1.0 part diluent - estimate 3.7% theoretical solids
1 part adhesive: 1.5 part diluent - estimate 2.9% theoretical solids
1 part adhesive: 2.0 part diluent - estimate 2.5% theoretical solids
1 part adhesive: 2.5 part diluent - estimate 2.1% theoretical solids
1 part adhesive: 3.0 part diluent - estimate 1.8% theoretical solids

Application Technique

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

Spraying: dilute one part product with six parts diluents.

Drying the Film

The drying time is approximately 5 minutes at 130°C (266°F), 10 minutes at 100°C (212°F), or 15 minutes at 82°C (180°F).

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Molding and Curing
Can be used with all common molding and curing methods. Cure temperatures between 150°C and 210°C (300°F and 410°F) are recommended.
Pre-Bake Resistance
Coated inserts can be pre-baked for up to 5 minutes at 130°C (266°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 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] Seta Closed Cup
[4] ULA Spindle, @ 100 RPM
[5] Applied at a dry film thickness of 0.04 mil
[6] Unopened

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