



MEGUM™ 5386

Description MEGUM™ 5386 general purpose cover coat adhesive used for bonding rubber compounds to metals and other rigid substrates during vulcanization.

This product is especially suitable for bonding both difficult to bond compounds and soft compounds. MEGUM™ or THIXON™ adhesive primers are used to adhere to metals such as hot and cold rolled steel, stainless steel, aluminum and brass prior to applying MEGUM™ 5386. These same primers can be used to adhere to thermoplastics such as polyamides and polyesters.

Benefits & Features This product is especially suitable for bonding both difficult to bond compounds and soft compounds used in NVH applications. MEGUM™ or THIXON™ adhesive primers are used to adhere to metals such as hot and cold rolled steel, stainless steel, aluminum and brass prior to applying MEGUM™ 5386. These same primers can be used to adhere to thermoplastics such as polyamides and polyesters.

Uncured Properties	Nominal Value	Unit	Test Method
Color	Black		
Solids Content			
-- 1	14	%	
-- 2	21 to 24	%	ASTM D2369
Density	0.971	g/cm ³	ASTM D1475
Dry Film Density	1.5	g/cm ³	
VOC Content	6.30	lb/gal	
Flash Point	26.0	°C	DIN 53213
Viscosity ³ (20°C, Brookfield RVT)	0.25 to 0.65	Pa·s	ASTM D1084
Viscosity (25°C)	26 to 60	sec	Zahn Cup 3
Theoretical Coverage ⁴	7.60	m ² /l	
Recommended Film Thickness	18	µm	
Recommended Film Thickness Range	10 to 25	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.

Surface Prep

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

Mix Instructions

Diluents: Toluene, xylene

First, thoroughly mix MEGUM™ 5386 with a high speed propeller-type agitator. If diluting, slowly add the diluents to the adhesive while mixing.

Continue to mix or re-circulate while dispensing MEGUM™ 5386 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.

- 1 part adhesive: 0 part diluent - estimate 22.0% theoretical solids
- 1 part adhesive: 0.1 part diluent - estimate 20.0% theoretical solids
- 1 part adhesive: 0.2 part diluent - estimate 18.3% theoretical solids
- 1 part adhesive: 0.3 part diluent - estimate 16.9% theoretical solids
- 1 part adhesive: 0.5 part diluent - estimate 14.7% theoretical solids
- 1 part adhesive: 0.8 part diluent - estimate 12.2% theoretical solids

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 - 0.3 parts diluent.

Spraying: dilute 1 part product with 0.4 - 0.8 parts diluent.

Drying the Film

The drying time is approximately 30 minutes at 28°C (68°F). At lower temperatures, dry longer. The drying time can be shortened by force drying 5 minutes at 80°C (176°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 130°C and 190°C (265 and 375°F) are recommended.

Pre-Bake Resistance

Coated inserts can be pre-baked for 5-15 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 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 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

² Non-volatile solids by weight

³ Spindle #2, @ 30 RPM

⁴ Applied at a dry film thickness of 0.6 mil

⁵ Unopened

Product Stewardship

The Dow Chemical Company and its subsidiaries ("Dow") has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our Product Stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our Product Stewardship program rests with each and every individual involved with Dow products — from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

Medical Applications Policy

NOTICE REGARDING MEDICAL APPLICATION RESTRICTIONS: Dow will not knowingly sell or sample any product or service ("Product") into any commercial or developmental application that is intended for:

- long-term or permanent contact with internal bodily fluids or tissues. "Long-term" is contact which exceeds 72 continuous hours;
- use in cardiac prosthetic devices regardless of the length of time involved ("cardiac prosthetic devices" include, but are not limited to, pacemaker leads and devices, artificial hearts, heart valves, intra-aortic balloons and control systems, and ventricular bypass-assisted devices);
- use as a critical component in medical devices that support or sustain human life; or
- use specifically by pregnant women or in applications designed specifically to promote or interfere with human reproduction.

Dow requests that customers considering use of Dow products in medical applications notify Dow so that appropriate assessments may be conducted. Dow does not endorse or claim suitability of its products for specific medical applications. It is the responsibility of the medical device or pharmaceutical manufacturer to determine that the Dow product is safe, lawful, and technically suitable for the intended use. **DOW MAKES NO WARRANTIES, EXPRESS OR IMPLIED, CONCERNING THE SUITABILITY OF ANY DOW PRODUCT FOR USE IN MEDICAL APPLICATIONS.**

Disclaimer

NOTICE: No freedom from infringement of any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, the Customer is responsible for determining whether products and the information in this document are appropriate for the Customer's use and for ensuring that the Customer's workplace and disposal practices are in compliance with applicable laws and other governmental enactments. Dow assumes no obligation or liability for the information in this document. **NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.**

NOTICE: If products are described as "experimental" or "developmental": (1) product specifications may not be fully determined; (2) analysis of hazards and caution in handling and use are required; (3) there is greater potential for Dow to change specifications and/or discontinue production; and (4) although Dow may from time to time provide samples of such products, Dow is not obligated to supply or otherwise commercialize such products for any use or application whatsoever.

NOTICE: This data is based on information Dow believes to be reliable, as demonstrated in controlled laboratory testing. They are offered in good faith, but without guarantee, as conditions and method of use of Dow products are beyond Dow's control. Dow recommends that the prospective user determine the suitability of these materials and suggestions before adopting them on a commercial scale.

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication, however we do not assume any liability for the accuracy and completeness of such information.

Additional Information

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

This document is intended for use within Asia Pacific, Europe, Latin America, North America

Published: 2015-05-15

© 2018 The Dow Chemical Company

