

ADHESIVES AND SEALANTS

MEGUM™ 3290-1 Solvent-Based Adhesive

DESCRIPTION

MEGUM 3290-1 is a one-coat bonding agent for bonding fluoro-carbon rubbers to metals and other rigid substrates during vulcanization.

MEGUM 3290-1 is suitable for all common curing systems including bisphenolic and peroxide curing.

Product Typical Properties

MEGUM 3290-1	
Appearance	Colorless to yellowish, liquid
Dry solid content (Non-volatile solids by wei	7.0-8.0% ght)
Dynamic viscosity	2 mPa.s (cP)
Density (20°C)	0.82-0.85 g/cm ³
Specific gravity (20°C)	0.84 g/cm ³
Weight per gallon	7.0 lbs
Volume solids	5.8% (calculated)
VOC content per gallon	5.7 lbs (calculated)
Dry film density	1.1 g/cm ³ (calculated)
Flash point (Seta)	+13°C/55°F
These properties are typical and are not to be used for specifications purposes.	

Main Features

Composition : MEGUM 3290-1 consists of reactive silane polymers and a special salt in ethanol and water. It is formulated without reportable levels of lead or other toxic heavy metals.

Elastomers : FKM, etc.

Materials: MEGUM 3290-1 adheres to hot and cold rolled steel, stainless steel, aluminium, brass, as well as thermoplastics such as polyamides and polyesters.

Molding and Curing: MEGUM 3290-1 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.

Environmental Resistance : Properly prepared bonds using MEGUM 3290-1 display resistance to external influences, especially to fuels, motor oils and high temperatures.

DIRECTIONS FOR USE

Preliminary Surface Preparation

Properly preparing the metal surface is essential to obtaining consistent, high quality bonds.

A mechanical or chemical pre-treatment should follow degreasing. Common pre-treatments are grit blasting and phosphating. Further details are provided in our "Substrates Preparation Guide", please contact your usual Rohm and Haas commercial representative should you need a copy of this guide.

Mixing and Diluting

Diluents : Use ethanol or mixtures of ethanol and MEK as diluents.

Applying the Adhesive

MEGUM 3290-1 can be applied by brushing, dipping, spraying or other application methods.

Application Methods

Brushing

Dilution ratio : 1 p.b.w. bonding agent + 0.5-3.0 p.b.w. diluent.

Dipping

Dilution ratio : 1 p.b.w. bonding agent + 1.0-5.0 p.b.w. diluent.

Spraying with air

Dilution ratio : 1 p.b.w. bonding agent + 2.0-6.0 p.b.w. diluent.

Spray gun : Most spray equipment can be used.

Nozzle : e.g. 1.0 mm/0.04 in. **Air pressure :** 2-4 bar/30-60 psi.

The optimum dilution ratio for your application has to be determined.

Drying Time

The drying time is approximately 20 minutes at $20^{\circ}\text{C}/68^{\circ}\text{F}$.

Drying at higher temperatures will reduce drying time accordingly.

Suggested Dry Film Thickness

Apply MEGUM 3290-1 at a dry film thickness of less than 2 microns (0.08 mil.).

Dry Film Stability

Inserts coated with MEGUM 3290-1 can be stored for up to 2 weeks, if protected from contamination.

Theoretical Coverage

Applied at a dry film thickness of 1 micron (0.04 mil.), MEGUM 3290-1 will cover approximately 69 m²/kg (2360 square feet/gallon).

Oven Pre-baking

It is useful to pre-bake the adhesive-coated inserts for 15 minutes at 120°C to 150°C (250°F to 300°F).

Cleaning

Cleaning should be done using recommended dilution solvents. Further details are given in our "General Guide to Use", please contact your usual Rohm and Haas commercial representative should you need a copy of this guide.

Storage and Handling

Keep containers tightly closed. Store them in a cool, dry, well-ventilated area away from heat, direct sunlight and sources of ignition. Containers should be supported and grounded before opening, dispensing, mixing, pouring or emptying.

Shelf Life

MEGUM 3290-1 has a shelf life of at least 24 months if stored unopened at temperatures below 25°C/77°F. If the material is kept beyond its recommended shelf life, a quality control evaluation should be performed prior to use.

Safety Information

Material Safety Data Sheets (MSDS) are available for all Rohm and Haas products. These sheets contain important information that you may need to protect your employees and customers against any known health and safety hazards associated with our products. We recommend that you obtain copies of our MSDS from your local Rohm and Haas technical representative before using our products in your facilities. We also suggest that you contact your suppliers of other materials recommended for use with our products for appropriate health and safety precautions before using them.

MEGUM is a registered trademark of Rohm and Haas Company.

These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and method of use of our products are beyond our control. We recommend that the prospective user determine the suitability of our materials and suggestions before adopting them on a commercial scale

Suggestions for uses of our products or the inclusion of descriptive material from patents and the citation of specific patents in this publication should not be understood as recommending the use of our products in violation of any patent or as permission or license to use any patents of the Rohm and Haas Company.

Rohm and Haas Company - 10 South Electric Street, West Alexandria, OH 432761, USA - Phone: +1 800 348 8846 - Fax : +1 937 839 1342 Rohm and Haas France - Z.I. Le Pressoir Vert, 45400 SEMOY, FRANCE - Phone: +33(0)2 38 61 81 00 - Fax : +33(0)2 38 83 88 96 Rohm and Haas Deutschland - In der Kron 4, 60489 Frankfurt am Main, GERMANY - Phone: +49(0)69 789 960 - Fax : +49(0)69 789 5356

