



# MEGUM™ 3299 Solvent-Based Adhesive

### DESCRIPTION

MEGUM 3299 is a one-coat bonding agent for bonding fluoro-carbon rubbers to metals and other rigid substrates during vulcanization.

MEGUM 3299 is especially suitable for peroxide curing systems.

### Product Typical Properties

MEGUM 3299	
Appearance	Colorless to yellowish, liquid
Dry solid content (Non-volatile solids by weight)	6.5-8.0%
Dynamic viscosity	2 mPa.s (cP)
Density (20°C)	0.80-0.84 g/cm <sup>3</sup>
Specific gravity (20°C)	0.82 g/cm <sup>3</sup>
Weight per gallon	6.85 lbs
Volume solids	6.2% (calculated)
VOC content per gallon	6.1 lbs (calculated)
Dry film density	1.0 g/cm <sup>3</sup> (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 3299 consists of reactive silane polymers in ethanol and water. It is formulated without reportable levels of lead or other toxic heavy metals.

**Elastomers :** FKM, etc.

**Materials :** MEGUM 3299 adheres to hot and cold rolled steel, stainless steel, aluminium, brass, as well as thermoplastics such as polyamides and polyesters.

**Molding and Curing :** MEGUM 3299 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 3299 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 3299 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°C/68°F.

Drying at higher temperatures will reduce drying time accordingly.

## Suggested Dry Film Thickness

Apply MEGUM 3299 at a dry film thickness of less than 2 microns (0.08 mil.).

## Dry Film Stability

Inserts coated with MEGUM 3299 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 3299 will cover approximately 76 m<sup>2</sup>/kg (2540 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 3299 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.

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