



MEGUM™ 15637 Solvent-Based Adhesive

DESCRIPTION

MEGUM 15637 is a one-coat adhesive for the bonding of polar elastomers to metal and other rigid substrates during vulcanization.

Product Typical Properties

MEGUM 15637	
Appearance	Black, liquid
Dry solid content (Non-volatile solids by weight)	36-39%
Viscosity, Brookfield (LV #2 spindle at 60 rpm)	20-100 mPa.s (cP)
Density (20°C)	0.93-0.97 g/cm ³
Specific gravity (20°C)	0.95 g/cm ³
Weight per gallon	7.9 lbs
Volume solids	27.9% (calculated)
VOC content per gallon	4.9 lbs (calculated)
Dry film density	1.27 g/cm ³ (calculated)
Flash point (Seta)	+2°C/36°F
These properties are typical and are not to be used for specifications purposes.	

Main Features

Composition : MEGUM 15637 consists of reactive polymers and pigments in ethanol and methyl ethyl ketone (MEK). It is formulated without reportable levels of lead or other heavy metals.

Elastomers : NBR, HNBR, ACM, ECO, etc.

Materials : MEGUM 15637 adheres to hot and cold rolled steel, stainless steel, aluminium, brass and thermoplastics such as polyamides and polyesters.

Molding and Curing : MEGUM 15637 can be used with all common molding and curing methods. Cure temperatures between 120°C and 205°C (250°F and 400°F) are recommended.

Environmental Resistance : Properly prepared bonds using MEGUM 15637 display resistance to external influences, especially 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 ketones such as methyl ethyl ketone (MEK) or methyl isobutyl ketone (MIBK) as diluents.

First, thoroughly mix MEGUM 15637 with a propeller-type agitator. If diluting, slowly add the diluent to the adhesive while mixing constantly.

Continue to mix MEGUM 15637 while spraying or dipping to keep the dispersed solids from settling to the bottom. This will assure that a homogeneous mixture of the adhesive is applied.

Applying the Adhesive

MEGUM 15637 can be applied by brushing, dipping, spraying or other application methods.

Application Methods

Brushing

Dilution ratio : Use undiluted.

Dipping

Dilution ratio : 1 p.b.w. bonding agent + 0.2-0.4 p.b.w. diluent.

Spraying with air

Dilution ratio : 1 p.b.w. bonding agent + 0.5-2.0 p.b.w. diluent.

Viscosity : at 20°C/68°F.

3-15 mPa.s (cP) [Brookfield, LV#1 spindle at 60 rpm].

11-15 seconds [DIN-4-cup].

12-17 seconds [Ford-4-cup].

14-20 seconds [Zahn #2 cup].

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.

Drying Time

The drying time is approximately 30 minutes at 20°C/68°F.

Drying at higher temperatures will reduce drying time accordingly, e.g. 5 minutes force drying at 80°C/176°F. Heated circulating air will further accelerate drying.

Suggested Dry Film Thickness

Apply MEGUM 15637 at a dry film thickness of 5 to 10 microns (0.2 to 0.6 mil.).

Dry Film Stability

MEGUM 15637 has excellent dry film stability. Inserts coated with MEGUM 15637 can be stored for several weeks, if protected from contamination.

Theoretical Coverage

Applied at a dry film thickness of 10 microns (0.4 mil.), MEGUM 15637 will cover approximately 29 m²/kg (1140 square feet/gallon).

Oven Pre-baking

To fix the adhesive on the substrate and to avoid sweeping during transfer and injection molding, it is useful to pre-bake the adhesive-coated inserts for 15 minutes at 115°C to 135 °C (240°F to 275°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 15637 has a shelf life of at least 15 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. This check should include bond testing as well as evaluation of typical physical properties.

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 45381, 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

