

#### Technical Data Sheet

### DOWSIL<sup>TM</sup> 902H Resin

#### **FEATURES & BENEFITS**

- Provides excellent water repellency, water vapour permeability and UV resistance to coatings films
- Alkoxy silyl groups react chemically upon drying
- Good binding properties for filler and pigments
- Enhanced beading and hydrophobing effect achievable with addition of a beading additive from us
- Can be diluted or used as supplied
- Addition levels range between 6% and 10%

Enables formulation of water-born silicone resin paints with:

- Excellent water repellency
- High water-vapor permeability
- Increased resistance to UV degradation
- High pigment volume concentration
- Low VOC according to 2004/42/EC: 15 g/l;
- U.S. VOC regulations, Include/Exclude Value; 126 g/l 238 g/l
- Increased resistance to blistering, cracking, and peeling

#### **COMPOSITION**

- Silicone resin emulsion
- 50% active ingredients

Silicone resin emulsion for Architectural coating applications

#### **APPLICATIONS**

 For formulation of water-born silicone-resin-based coatings that have low water absorption and high gas- and moisture-vapor permeability

#### TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications.

Test	Unit	Result
Color		Milky white
Active Content	%	50
рН		6–9
Density	g/cm <sup>3</sup>	1.02
Solvent (Thinner)		Water
Viscosity	mPa•s	1500

#### DESCRIPTION

DOWSIL<sup>TM</sup> 902H Resin is a 50% active non-ionic silicone resin emulsion. It is used as a co-binder in water-born silicone-resin-based architectural coating formulations to provide high water-vapor permeability, good water repellency, and high UV resistance when formulated properly. Typically, DOWSIL 902H Resin is used in conjunction with additional acrylic-based binders.

As a reactive silicone resin emulsion, active ingredients from DOWSIL 902H Resin can chemically react with fillers and pigments.

Silicone resins are well known for their ability to reinforce and bind inorganic materials. This leads to protection of the hydrophilic pigments or fillers from water intrusion in the film.

#### **HOW TO USE**

DOWSIL 902H Resin can be diluted in water before use or can be used as supplied. The water should be added to the emulsion. Deionized water is recommended for dilution. To prevent mold growth within the package, additional preservatives may be required.

For best performance, use levels of DOWSIL 902H Resin are recommended at 6–10% for coating applications.

Beading and water can be further improved by the addition of a small amount of a beading additive from us.

**HANDLING PRECAUTIONS** PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND **HEALTH HAZARD** INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW WEBSITE AT WWW.CONSUMER.DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

## USABLE LIFE AND STORAGE

DOWSIL 902H Resin should be stored under dry conditions. Avoid freezing.

When stored at or below 40°C (104°F) in the original unopened containers, this product has a useable life of 12 months from the date of manufacture.

# PACKAGING INFORMATION

DOWSIL 902H Resin is supplied in 500 mL bottles, 20 kg pails, 200 kg drums and 1,000 kg IBC quantities.

#### **LIMITATIONS**

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

### HEALTH AND ENVIRONMENTAL INFORMATION

To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.

For further information, please see our website, www.consumer.dow.com or consult your local Dow representative.

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