



## Technical Data Sheet

### **DOWSIL™ 18 Additive**

Silicone additive provides slip and mar resistance for solvent-based coatings as well as a mar resistance for water-based coatings and inks

#### **Features & Benefits**

- Slip- and mar-resistance additive for solvent-based coatings
- Mar-resistance additive for water-based coatings and inks
- Contains no solvents

#### **Composition**

- Non-reactive high-molecular- weight polydimethyl siloxane dispersion containing no volatile solvent

#### **Applications**

DOWSIL™ 18 Additive imparts mar resistance, slip and antiblocking properties to waterborne, high-solids and solventless inks, UV and EB radiation- cure overprint varnishes, paints and coatings:<sup>1</sup>

To improve slip and mar resistance:

- Coatings
  - Solvent-based paints at 0.2–0.5%

To improve mar resistance:

- Coatings
  - Water-based wood coatings at 0.5–1.0% based on solids
- Inks
  - Water-based flexographic inks at 0.1–0.2% or as high as 2.0–3.0%

DOWSIL™ 18 Additive also provides “hand” to leather, “wet look” to fabric coatings and reduced friction and wear to castable urethanes.

<sup>1</sup>All usage levels are weight percents based on the total formulation.

## Typical Properties

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

Property	Unit	Result
Physical Form		White, nonpourable paste
Nonvolatile Content	percent	100
Specific Gravity at 25°C (77°F)		0.93
Flash Point, Closed Cup	°C (°F)	168 (334)
Viscosity at 25°C (77°F)	cs	500,000

## How to Use

DOWSIL™ 18 Additive is effective at low concentrations. The amount required depends on the type of formulation, the solvent it contains, resin system and total system solids. DOWSIL™ 18 Additive is generally effective at concentrations ranging from 0.05 to 0.5 weight percent or as high as 1.0 to 3.0 weight percent based on total formulation. This additive can be added during the let-down or can be post-added. Characteristics may vary when used with different systems and formulations. DOWSIL™ 18 Additive is compatible with acrylic, alkyd, epoxy, polyesters, polyurethane and vinyl systems. Thorough preproduction testing is necessary to ensure expected performance.

## Handling Precautions

Caution: Direct eye contact may cause mild irritation.

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 DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

## Usable Life and Storage

DOWSIL™ 18 Additive has a shelf life of 21 months from date of manufacture. Refer to product packaging for "Use By" date.

## Packaging Information

DOWSIL™ 18 Additive is available in 500 ml samples, 15.8 kg (35 lb) pails and 172.3 kg (380 lb) drums.

## Limitations

This product is neither tested nor represented as suitable for medical or pharmaceutical uses. Not for human injection.

## Shipping Limitations

None.

## 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, [dow.com](http://dow.com) or consult your local Dow representative.

## **Disposal Considerations**

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Technical Representative for more information.

## **Product Stewardship**

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.

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