



Technical Data Sheet

DOWSIL™ 57 Additive

Additive for ink and coating applications

Features & Benefits

- Provides slip, gloss enhancement, pigment treatment and leveling for ink and coatings applications
- Provides mar resistance for coatings applications
- Compatible with acrylic, alkyd, amide, epoxy, nitrocellulose, phenolic, polyester, polyurethane and vinyl systems
- Does not contaminate
- Recoatable when used as directed

Composition

- Nonreactive silicone glycol copolymer surfactant supplied at 100 percent active concentration

Applications

DOWSIL™ 57 Additive has been successful in these industrial applications¹:

- To improve leveling:
 - Ink: Water-based flexographic ink at 0.05–0.1% (based on solids)
 - Coating: Solvent-based plastic coating at 0.1–0.2%
Water-based industrial coating at 0.2–0.5%
 - Paint: Water-based paint at 0.1–0.5%
Solvent-based paint at 0.05–0.2%
- To reduce coefficient of friction:
 - Ink: Water-based flexographic ink at 0.05–0.1% (based on solids) or 0.1–0.2% (based on total formulation)
 - Paint: Water-based paint at 0.2–1.0%
Solvent-based paint at 0.05–0.2%
- To improve mar resistance:
 - Coating: Water-based industrial coating at 0.2–0.5%
 - Paint: Water-based paint at 0.5–1.0% or as low as 0.1%
Solvent-based paint at 0.05–0.1%
- To enhance gloss:
 - Ink: Water-based flexographic ink at 0.05–0.1% based on solids
 - Paint: Water-based paint at 0.5–0.75%
- To aid in pigment dispersing:
 - Paint: Water-based paint at 0.05–0.15%

¹All 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
Appearance		Clear-to-hazy liquid
Specific Gravity at 25°C (77°F)		1.03
Flash Point, Closed Cup	°C (°F)	106.7 (224.06)
Viscosity at 25°C (77°F)	cs	270

How to Use

DOWSIL™ 57 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™ 57 Additive is generally effective at concentrations typically ranging from 0.05–1.0 weight percent, based upon total formulation. This additive can be added during the grind or let-down, or can be post-added. Characteristics may vary when used with different systems and formulations. DOWSIL™ 57 Additive is compatible with acrylic, alkyd, amide, epoxy, nitrocellulose, phenolic, polyester, polyurethane and vinyl systems. Thorough preproduction testing is necessary to ensure expected performance.

Blending/Diluting

DOWSIL™ 57 Additive is typically added during the final thinning and color matching step. It should be blended after the paint has been removed from the processing equipment. DOWSIL™ 57 Additive can be diluted with isopropyl alcohol or dispersed in water.

Recoating

Finishes incorporating DOWSIL™ 57 Additive are generally recoatable without surface preparation. In the unlikely event, that recoating difficulties occur, the surface should be washed with solvent and wet sanded with a 1 percent detergent solution.

Handling Precautions

Caution: Direct contact with eyes may irritate with redness and swelling. A single short exposure with the skin may irritate. See SDS for additional information.

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

When stored above -50°C (-58°F) and below 50°C (122°F), DOWSIL™ 57 Additive has a shelf life of 30 months from date of manufacturing. Refer to product packaging for "Use By" date.

Packaging Information

DOWSIL™ 57 Additive is available in 4 fl oz (120 mL) samples, 46.3 lb (21 kg) pails and 441 lb (200 kg) drums.

Shipping Limitations

Combustible liquid. Store and ship in appropriate containers.

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, 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.

dow.com

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