

Technical Data Sheet

DOWSIL™ 67 Additive

Silicone wetting agent for aqueous coatings

Features

- Low viscosity
- Low surface tension
- Imparts good spreading and wetting
- High flash point (> 100°C/> 212°F)
- Soluble in water

Applications

- Improves the wetting of water-borne coatings on difficult substrates.
- Improves the wetting of water reducible flexographic and rotographic inks on high slip polyethylene, polypropylene and polyethyleneterephthalate used in packaging.
- Reduction in the amount of organic co-solvents used to effect good wetting and confers improved printing characteristics.

Typical Properties

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

Property	Unit	Result
Appearance		Clear to slightly hazy, amber colored fluid
Viscosity at 25°C (77°F)	mm²/s	40
Melting point	°C °F	-33 -27.4
Flash point - closed cup	°C °F	> 100 > 212
Active content w/w	%	100
Cloud point (1.0% in water)	°C °F	< 10 < 50

How To Use

The typical addition range is 0.1 to 1.0% by weight of DOWSIL™ 67 Additive in the ink formulation.

The surface mobility of DOWSIL 67 Additive can be demonstrated by comparing the equilibrium and dynamic surface tensions of aqueous solutions as shown in Table 1.

Table 1: Equilibrium and Dynamic Surface Tension of Aqueous Solutions

% in Water	Equilibrium Surface Tension (mN/m)	Dynamic Surface Tension (mN/m)
DOWSIL 67 Additive		
0.01	22.7	54.0
0.1	21.1	34.0
1.0	20.7	23.1

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

When stored at or below 30°C (86°F) in the original unopened containers, this product has a usable life of 24 months from the date of production.

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.

Table 2: Efficiency of DOWSIL 67 Additive as a Wetting Agent

Polyethylene wetting radius (cm) of 0.2 ml droplet

% in Water	DOWSIL 67 Additive
0	0.30
0.01	0.76
0.1	1.65
1.0	1.90
(Polyethylene surface energy 22 mN/m)	

http://www.consumer.dow.com

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