



## Technical Data Sheet

### DOWSIL™ 603T Additive

Silicone additive reducing gloss and improving surface properties such as scratch resistance or softness in solventless UV coatings

#### Features & Benefits

- White silicone fine powder
- Contain methacryloxy group
- Provides matte finish
- Imparts scratch resistance
- Improves coating softness

#### Composition

- Silicone elastomer powder with methacryloxy functionality

#### Applications

- Acrylic UV inks and paints

#### Typical Properties

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

Property	Unit	Result
Appearance		White powder
Average particle size	µm	2
Particle size distribution	µm	1–3
Bulk density	g/mL	0.13

#### Description

DOWSIL™ 603T Additive is a cross-linked methacryloxy functional silicone elastomer powder.

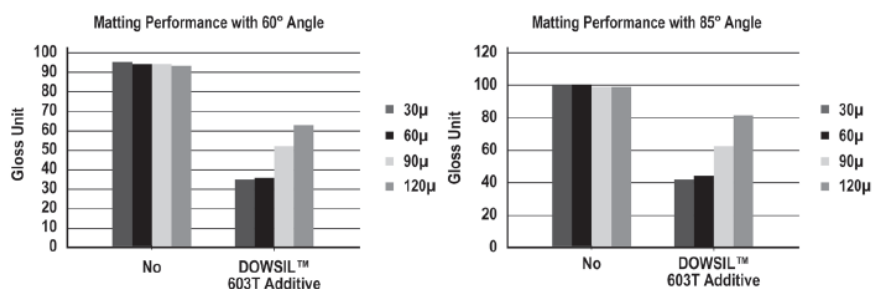
#### How to Use

DOWSIL™ 603T Additive can be added into a resin under high shear conditions.

Typical addition level 1% to 10% based on coating solids depends on the desired level of matting and scratch resistance.

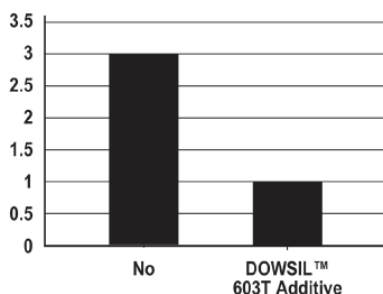
## Performance In UV Acrylic Ink

### Matting



**Figure 1:** Matting Performance in UV acrylic ink at 10% addition of DOWSIL™ 603T Additive

### Softness Evaluation



**Figure 2:** Softness Evaluation with 10% addition of DOWSIL™ 603T Additive (1 = Pass, 3=Bad)

## Scratch Resistance

**Table 1:**

Scratch Resistance in UV acrylic ink (10% Addition of DOWSIL™ 603T Additive)

E-Powder	Scratch test – weight value (g)			
	30μ	60μ	90μ	120μ
No	50	100	100	150
DOWSIL™ 603T Additive	200	200	250	350

The value provides the force (weight) which is sufficient to see the first scratch effect through the surface coating

## Handling Precautions

The user should incorporate proper handling and processing procedures to avoid flame and ignition sources. Please refer to the material safety data sheet for further 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 at or below 25°C in the original unopened containers, this product has a usable life of 27 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, [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.

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