

#### **Technical Data Sheet**

#### **DOWSIL™ 84 Additive**

Silicone additive for aqueous inks

## Features & Benefits

- Imparts good tensile strength to inks
- Imparts good elongation to inks
- Inks have improved coefficient of friction
- Imparts good weathering properties to inks
- Inks have improved gloss and mar resistance
- Protective, water-resistant fabric coating
- Dries to an elastomeric film

#### **Applications**

- Used as an additive for water based and dilutable inks provide water and mild chemical resistance
- It may be used as a protective and water-resistant coating for a variety of woven and non-woven textiles and fabrics

### **Typical Properties**

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

| CTM <sup>1</sup> | Property  | Unit  | Result        |
|------------------|---|-------|---------------|
| 0176             | Appearance  |       | Opaque liquid |
|                  | Non-volatile content                              | %w/w  | 60            |
| 0021A            | Flash point, closed cup                           | °C    | > 100         |
|                  |   | °F    | > 212         |
| 0001A            | Specific gravity at 25°C (77°F) /15.6°C (60.08°F) |       | 1.10          |
| 0004             | Viscosity at 25°C (77°F)                          | mPa.s | 500           |
| 0007             | рН  |       | 11            |

<sup>1.</sup> Corporate Test Method, copies of CTM's are available on request.

#### **How to Use**

DOWSIL™ 84 Additive must be stirred well before using. A layer separation may occur in shipping which has no detrimental effect on the performance of the material. Drum rolling is required to remix the emulsion. If DOWSIL™ 84 Additive is used over a long period of time, it should be remixed before each use. DOWSIL™ 84 Additive is cured by simple evaporation of water at room temperature. The evaporation of water may be accelerated by elevating the temperature.

#### How to Use (Cont.)

#### **Formulating for Lower Costs**

If DOWSIL™ 84 Additive is too concentrated as supplied, dilution may be made with water. In addition, extending fillers can be added.

#### **Rheology Modification**

DOWSIL™ 84 Additive can be thickened with numerous clay, acrylic, and cellulose thickeners is supplied prethickened. Methocel, rheolate and gelwhite thickeners have been found to be compatible.

#### **Formulated Colored Coatings**

This material can be pigmented with water based colorants. Universal colors UCD "a" line and Harshaw Aurasperse colors have been found to be compatible with DOWSIL™ 84 Additive.

## Handling Precautions

In case of skin or eye contact, flush area thoroughly with large amounts of water. In case of eye contact seek medical attention.

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

Usable life will be impacted when the products are stored below 7°C (44.6°F) and above 32°C (89.6°F).

When stored at or below 25°C (77°F) in the original unopened containers, this product has a usable life of 24 months from the date of production.

## Packaging Information

This product is available in 18 kg and 214 kg 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.

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