

#### **Technical Data Sheet**

#### **DOWSIL™ 2014 Adhesive**

Solvent-less silicone pressure sensitive adhesive

## Features & **Benefits**

- Solvent-less
- High peel adhesion and moderate tack
- Stable adhesion and tack
- Fast curing
- Low oven dusting
- Good coatability

## Composition

Polydimethylsiloxane polymer and resin

### **Applications**

- Manufacture of adhesive tapes, labels and transfer films
- Bonding low energy substrates
- High and low temperature labeling applications
- Protective film application through blending with low adhesion addition cure PSAs

### **Typical Properties**

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

CTM <sup>1</sup>	Property	Unit	Result
CTM 0176	Appearance		Clear
	Physical form		Liquid
CTM 0050	Viscosity at 25°C	mPa.s	7,000–10,000
CTM 0270A	Adhesion <sup>2</sup>	g/in	1000–1100
CTM 0261	Ball tack <sup>3</sup>		14–16

## **Description**

DOWSIL™ 2014 Adhesive is a solventless silicone pressure sensitive that, when used with SYL-OFF™ 4000 Catalyst, offers the ability to prepare pressure sensitive constructions at low curing temperatures. It also yields a stable release system when applied and cured on release liner coated with SYL-OFF™ Q2-7785 Coating and SYL-OFF™ Q2-7795 Coating.

CTM: Corporate Test Method, copies of CTM's are available on request.
40 um dry-thickness adhesive on 50 um PET film, 1.0 % SYL-OFF™ 4000 Catalyst, curing cycle 180 seconds at 150°C, stainless steel, 0.3 m/minute, 180° angle.

<sup>3.</sup> Rolling ball tester, 40 um dry adhesive thickness, 50 um PET film, 1.0% SYL-OFF 4000 Catalyst, curing cycle 180 seconds at 150°C.

## **Description (Cont.)**

DOWSIL™ 2014 Adhesive can be blended with other DOWSIL™ solvent free platinum catalyzed PSAs like DOWSIL™ 7626 Adhesive DOWSIL™ 7636 Adhesive DOWSIL™ 7646 Adhesive and DOWSIL™ 7666 Adhesive to adjust peel adhesion.

#### **How to Use**

This product is crosslinker included and must be blended with the appropriate SYL-OFF™ catalysts to cure. Anchorage additive is optional to use to improve the anchorage performance on substrates. Adhesive is solventless as supplied but can be diluted to reduce the viscosity if desired. When diluting with any solvent, refer to the solvent vendor's safety data sheet for information on physical and health hazards associated with the solvent and use of ventilation, PPE, bonding and grounding or other measures that can minimize or eliminate these risks. The following formulation is recommended for PET substrate as below chart:

Component	Parts by weight	
DOWSIL™ 2014 Adhesive	100	
SYL-OFF™ 297 Anchorage Additive	0.5	
SYL-OFF™ 4000 Catalyst	1.0	

- Recommended cure condition is 120–150°C for 1–3 minutes.
- Comma bar/slot die coating technics are applicable in production line.
- More detailed information can be obtained from the Local Technical Service Group.

#### **Bath Life**

The life of the formulated bath varies considerably with the specific formulation, and the temperature of the surroundings. Under normal bath condition at room temperature the bath should be used up within 6 hours.

# 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 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 32°C (90°F) in the original unopened containers, DOWSILTM 2014 Adhesive has a usable life of 12 months from the data of production.

# Packaging Information

This product is available by pail size with 19 kg or drum with 200 kg.

### 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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