



Technical Data Sheet

DOWSIL™ 2013 Adhesive

Solventless pressure sensitive adhesive

Features & Benefits

- Solventless
- Fast curing
- Low oven dusting
- Excellent low temperature performance (-150°F / -100°C)
- Excellent high temperature performance (500°F / 260°C)
- Adheres to low energy surfaces
- Releasable from SYL-OFF™ Q2-7785 Release Coating

Applications

- Manufacture of adhesive tapes, labels and transfer films
- Bonding low energy substrates
- High and low temperature labeling applications

Typical Properties

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

Test ¹	Property	Unit	Result
	Form		Liquid
	Chemical Nature		Reactive siloxane polymer
	Non-Volatile Content	%	100
CTM 0050	Viscosity	cSt	13,100
CTM 0270A	Peel Adhesion ²	oz/inch	50
CTM 0991C	Probe Tack ³	g	620

1. CTM: Corporate Test Method, copies of CTM's are available on request.
2. 1.7 mil dry adhesive thickness, 2 mil polyester film, 0.4% SYL-OFF™ 4000 Catalyst, curing cycle 180 seconds at 150°C, stainless steel, 12 inches/minute, 180° angle.
3. Polyken Tack Tester, 0.5 sec dwell time, 0.5 cm/sec draw speed, 1.7 mil dry adhesive thickness, 2 mil polyester film, 0.4% SYL-OFF™ 4000 Catalyst, curing cycle 180 seconds at 150°C.

Description

DOWSIL™ 2013 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 Release Coating.

How To Use

DOWSIL™ 2013 Adhesive is typically catalyzed with 0.4 parts per hundred SYL-OFF™ 4000 Catalyst. The 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.

Curing

When used in the manufacture of pressure sensitive constructions, catalyzed DOWSIL™ 2013 Adhesive is typically coated onto flexible substrates such as polyester or polyolefin films. In this configuration, the adhesive can be cured at 150°C (300°F) for 2 minutes in a vented, continuous coating oven. Airflow patterns, air volume and velocity will have an impact on adhesive curing speed. If the cure speed needs to be increased or process oven temperatures lowered, the SYL-OFF™ 4000 Catalyst level can be increased up to 1.0%.

Completeness of cure can be determined by laminating a test specimen to a steel panel, similar to a 180° peel test, and pulling the tape rapidly from the panel by hand. When completely cured, the adhesive will remain on the backing. If not fully cured, an adhesive residue will remain on the steel panel.

NOTE: The catalyst in this adhesive system is required to obtain pressure sensitive adhesive properties. It is also subject to contaminations by peroxides and other materials. Clean all mixing and coating equipment and use dedicated new containers for mixing when possible.

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 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 50°C (122°F) in the original unopened containers, DOWSIL™ 2013 Adhesive has a usable life of 12 months from the date of production.

Packaging Information

This product is available in a variety of container sizes including drums and pails. Contact your local customer service representative for information about container sizes available in your area.

UNRESTRICTED – May be shared with anyone

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DOWSIL™ 2013 Adhesive

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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, consumer.dow.com or consult your local Dow representative.

consumer.dow.com

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