



## Technical Data Sheet

### DOWSIL™ 7642 Adhesive

Pressure sensitive adhesive (PSA) tape

#### Features & Benefits

- Low adhesion strength

#### Composition

- Polydimethyl/methylvinyl siloxane

#### Applications

- Applications requiring low adhesion and good wet-out performance for protective tape/film

#### Typical Properties

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

Test <sup>1</sup>	Property	Unit	Result
	Physical Form		Viscous liquid
CTM0176	Appearance		Clear to colorless
CTM0208	Non-volatile content	%	> 99
CMT0050	Viscosity	mPa.s	20,000~50,000
CTM0270	Peel Adhesion	oz/in	< 0.1

1. CTM: Corporate Test Method, copies of CTM's are available on request.

#### Description

DOWSIL™ 7642 Adhesive consists of 100% active ingredients that provides low adhesion performance for silicone pressure sensitive coating. It can be applied in industrial protective films or adhesive tapes where there is a need to control adhesion. It shows excellent wet-out performance to various target material such as glass, metal and display screen and adheres with great wet-out performance, though it has very low adhesive force.

In order to adjust adhesion strength, DOWSIL™ 7642 Adhesive can be blended with addition cure PSAs such as DOWSIL™ 7652 Adhesive, DOWSIL™ 7657 Adhesive, DOWSIL™ 7687 Adhesive, etc.

## How to Use

DOWSIL™ 7642 Adhesive can be coated on backing material directly or blended with other PSAs, and is normally used with about 1.0 part SYL-OFF™ 7028 Crosslinker and 1 part SYL-OFF™ 4000 Catalyst.

This product is supplied as 100% solid content, and it can be further diluted in compatible solvent like toluene and xylene. 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.

Once it is mixed with its crosslinker and catalyst, quick usage within 6–8 hours is suggested for stable performance.

### Cure

When used in the manufacture of pressure sensitive constructions, DOWSIL™ 7642 Adhesive is normally coated onto flexible substrates such as polyester, polyolefin PTFE, or polyimide film and is cured at over 120°C for 1 minute in a vented, continuous coating oven. Air flow patterns, air volume and velocity will have an impact on adhesive curing speed. If the cure speed needs to be increased or process and backing material allowed a lower temperature, SYL-OFF™ 4000 Catalyst should be increased by up to 1.5%. However insufficient temperature can cause residue and poor anchorage performance by uncured adhesive.

Note: The catalyst in this adhesive system is required to obtain pressure sensitive properties. It is also subject to contamination 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 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, DOWSIL™ 7642 has a usable life of 12 months from the date of production.

## Packaging Information

This product is available by pail size with 18 kg and drum size with 180 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](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.

## **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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