



## Technical Data Sheet

### DOWSIL™ 7666 Adhesive

Base polymer component for low adhesion pressure sensitive adhesive

#### Features & Benefits

- Stable & low adhesion
- Fast cure by Pt catalyst

#### Composition

- Dimethyl, methylvinyl siloxane

#### Applications

- Applications requiring low adhesion and good wet-out performance for protective film
- Flexibility to use with other addition cure PSA to control peeling adhesion

#### Typical Properties

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

Property	Unit	Result
Type		Reactive polysiloxane
Physical Form		Liquid
Appearance		Clear
Active Ingredients	%	> 97
Viscosity at 25°C (77°F)	mPa.s	22500
Peel Adhesion <sup>1</sup>	g/in.	< 3

1. 15 u dry adhesive on 50 u PET film, 1% SYL-OFF™ 7028 Crosslinker, 1.2% SYL-OFF™ 4000 Catalyst, curing cycle 1.5 minute at 140°C; tape laminated on stainless steel panel, 0.3 m/m, 180 degree angle.

#### Description

DOWSIL™ 7666 Adhesive is a silicone pressure sensitive adhesive, it could be applied in industrial protective film with low adhesion. It could also be used by mixing with other additional cure PSAs like DOWSIL™ 7667 Adhesive to get proper higher adhesion.

#### How to Use

DOWSIL™ 7666 Adhesive can be coated on backing material directly as itself or blending with other PSA and normally used with SYL-OFF™ 7028 Crosslinker and SYL-OFF™ 4000 Catalyst. Typical substrate is PET film.

To improve bonding strength with substrate, anchorage additive can be applied. Corona treatment or primer treatment on substrate would be the best option to get good anchorage performance.

## How to Use (Cont.)

This product can be further diluted in compatible solvent like toluene, heptane, ethyl acetate, MEK, mixture solvent with aliphatic solvent etc. 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 hazards.

The following procedure is recommended for the preparation of coating bath. Equipment should be clean and dry, preferably constructed from stainless steel or glass.

1. DOWSIL™ 7666 Adhesive would be diluted by solvent heptane, toluene or other aliphatic solvents.
2. Add crosslinker such as SYL-OFF™ 7028 Crosslinker, anchorage additive such as SYL-OFF™ 297 Anchorage Additive and disperse thoroughly.
3. Add catalyst such as SYL-OFF™ 4000 Catalyst and disperse thoroughly again.

**Table 1:** Shows recommended starting point formulation:

Component	Parts by Weight
DOWSIL™ 7666 Adhesive	100
SYL-OFF™ 7028 Crosslinker	1.0
SYL-OFF™ 4000 Catalyst	1.2
SYL-OFF™ SL 297 Anchorage Additive	1.3
Solvent	120

NOTE: When transferring flammable liquids from one container to another, there is a fire risk due to static electric charge build-up. This risk is minimized by connecting both containers to a common ground.

## Bath Life

The life of the formulated bath viscosity varies considerably with bath concentration, the solvent, the specific formulation, and the temperature of the surroundings. Under 25°C (77°F) the bath should still be usable within 6 hours.

It is recommended that safety glasses and rubber or plastic gloves be worn when handling this product.

## 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 35°C (95°F) in the original unopened containers, this product has a usual life of 12 months from the data of production.

## Packaging Information

DOWSIL™ 7666 Adhesive is available in pail packaging of 18 kg and drum packaging of 160 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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