



DOWSIL™ 7637 Adhesive

Pressure sensitive adhesive (PSA)

Features & Benefits

- Very low adhesive force
- Strong wetting performance
- High viscous liquid

Composition

- Polydimethylsiloxane gum dispersion in toluene

Applications

- Applications requiring low and stable adhesion for protective tape/film
- Flexibility to use with other addition cure PSAs to control peeling adhesion

Typical Properties

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

Test ¹	Property	Unit	Result
CTM 0176	Appearance		Clear to pale yellow
CTM 0232	Diluent		Toluene
CTM 0208	Non-volatile Content	%	27–33
CTM 0050	Viscosity	cP	10,000–50,000

1. CTM: Corporate Test Method, copies of CTM's are available on request.
2. 30~40 um dry-thickness adhesive on 50 um PET film, 1.12 wt% benzoyl peroxide, curing cycle 2 minute at 180°C, tape laminated on SUS.

Description

DOWSIL™ 7637 Adhesive is a platinum catalyzed type silicone PSA, which could give low and stable adhesion performance. It could be used as adhesive for industrial tape, masking and protective film coating. It provides low and stable adhesion and good wetting performance with high MW silicone polymer.

DOWSIL™ 7637 Adhesive can be blended with high adhesion platinum catalyzed PSAs to adjust adhesion force.

How to Use

DOWSIL™ 7637 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.

How to Use (Cont.)

To improve bonding strength with backing material, anchorage additive can be applied. However, corona treatment of primer treatment on coated substrate would be best option to get good anchorage performance. This product is applied as high solid content, and it can be further diluted in compatible solvent like toluene, xylene and MEK.

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.

Cure

When used in the manufacture of pressure sensitive constructions, catalyzed DOWSIL™ 7637 adhesive is normally coated onto flexible substrate such as polyester, polyolefin, PTFE, or polyimide film and is cured at 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%. However, insufficient temperature can cause residue and poor anchorage performance by uncured adhesive.

**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™ 7637 Adhesive has a usable life of 450 days from the data of production.

**Packaging
Information**

This product is available by pail size with 18 kg or drum with 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 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.

dow.com

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