



Technical Data Sheet

SYL-OFF™ SB 7458 Coating

Description

A pre-catalyzed base polymer component with a 30% solids of a reactive siloxane polymer in toluene for SYL-OFF™ solvent-based, platinum-catalyzed silicone release coatings.

Uses / Applications

This product is suitable for use on general as well as specialty release substrates coated from solvent in the following applications:

- Release liners for pressure sensitive adhesive laminates/label stock
- Coating for liners of technical adhesive tapes
- In-line, single and double-sided industrial papers and films
- Non-stick packaging

Benefits

- Effective, fast cure for paper and film
- Provides stable release force
- Non-blocking non-migratory release liner
- Minimal post-cure
- Good anchorage property
- Flexibility to use with controlled release additives
- Easy to use two-component package

Physical Properties

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

Property	Unit	Result
Type		Reactive siloxane polymer
Physical form		Solvent dispersion
Color		Clear to slightly hazy
Diluents		Toluene
Active ingredients	%	30
Specific gravity at 25°C (77°F)		0.9
Viscosity at 25°C (77°F)	mPa.s	24,000
Flash point closed cup	°C	5

Processing and Application Guidelines

SYL-OFF™ SB 7458 Coating is suited for coating substrates with good solvent hold-out. Typical substrates include:

- Polyethylene coated kraft
- Super calendered kraft
- Clay-coated kraft
- Glassines
- Plastic films
- Metal foils

Paper substrates need careful consideration. The pre-coat found on some substrates can affect the cure. It is important, therefore, that users check the compatibility of the silicone coating and the substrate.

Bath Preparation

The coating cures by an addition reaction in the presence of heat. SYL-OFF™ SB 7458 Coating is pre-catalyzed. If a coating requires a very fast cure, an extra amount of Platinum catalyst may be added.

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

1. Disperse SYL-OFF™ SB 7458 Coating in the process solvent heptane, toluene or other aliphatic or aromatic solvents. The suggested bath solids are 4 to 6% silicone on a weight basis.
2. Add crosslinker such as SYL-OFF™ 7672 Crosslinker and disperse thoroughly.

Table 1

Typical formulations using SYL-OFF™ SB 7458 Coating

Component	wt.%, parts
SYL-OFF™ SB 7458 Coating	100
SYL-OFF™ 7672 Crosslinker	0.6
Toluene (solvent)	500

3. Optional components include:
 - Release modifier such as SYL-OFF™ 7200 Low Release Force Additive and SYL-OFF™ 7210 Release Modifier as controlled release additives.
 - Anchorage additive such as SYL-OFF™ 297 Anchorage Additive for improve abrasion resistance.

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 normal conditions the bath should still be usable within 6 hours.

Handling Precautions

SYL-OFF™ SB 7458 Coating contains highly flammable solvent. Keep away from heat and open flames. Avoid prolonged breathing of vapor. Use with adequate ventilation in work areas.

Direct eye or skin contact may cause slight irritation, which can be relieved by flushing the eye with water for 15 minutes.

If swallowed, do not induce vomiting, but obtain medical attention. This product has a low order of toxicity but may cause poisoning if solvent is aspirated into the lungs.

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

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.

Limitations

DOT classification: flammable.

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

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