

SilForce™ SM3030 Release Coating

SilForce* SM3030 Release Coating

Description

SilForce SM3030 release coating is a controlled release polymer emulsion intended for use in the SilForce SM3200 release coating system. Silforce SM3030 release coating is used to modify (raise) the release of the multi-component, addition-curing emulsion release SM3200 release coating for use in the manufacture of release liners for pressure sensitive tapes and labels, industrial release liners, casting papers, and food grade release and wrapping papers.

SYSTEM COMPONENTS

The SM3200 release coating system consists of the following easy and tight release polymers and catalyst:

- SM3200 FDA Compliant Easy Release Polymer - Fast Cure
- SM3010 Platinum Catalyst Concentrate
- SM3030 Tight Release Polymer (not FDA complaint as a component of coating for direct food contact)

Key Features and Benefits

- Premium release
- Fast cure
- Exceptional mechanical stability

- Good film formation
- Less inhibition by substrates
- Low foaming
- Low extractable silicone

Typical Physical Properties

PROPERTY	SM3200	SM3010	SM3030
% Solids	40	40	40
Viscosity cstks @ 25°C	5000 max.	5000 max.	5000 max.
Specific gravity @ 25°C	1.0	1.0	1.0
pH	6.0 max.	6.0 max.	6.0 max.
Appearance	Milky white	Milky white	Milky white

Patent Status

Standard copy to come

Product Safety, Handling and Storage

SilForce SM3030 release coating is an emulsion of a silicone fluid and silicone resin. SM3030 should be stored between 5 - 25C.

CAUTION

Destabilized release may occur with some types of adhesives, particularly solvent based self-crosslinking acrylics. Thorough release testing should be done prior to using for production purposes.

The warranty period for SM3200, SM3010 and SM3030 is 3months from the date of shipment from Momentive Performance Materials if stored in the original unopened container between 5°C (40°F) and 25°C (77°F).

All components of the system should be kept from freezing as it may cause damage and render them unusable.

Standard copy to come

Processing Recommendations

BATH PREPARATION AND APPLICATION

SM3200 release coating base should be catalyzed with SM3010 release coating at a ratio of 30:1 as a starting point for evaluation. Typical working solids are 8-20% depending on the substrate to be coated, the type of equipment to be used for application, and the silicone deposition required. SM3200 release coating should be added to the diluent water or diluent water/thickener blend, and dispersed prior to the addition of SM3010. SM3200 emulsion release polymer is compatible with conventionally used thickening agents (CMC, HEC, Xantan Gum). Typical bath life is 8 hours. The SM3200 emulsion release polymer system may be applied using a variety of coating methods including direct or reverse gravure, Mayer rod, size press, roll coating, etc. Heat should be applied to the coating as soon as possible after coating. Preferably forced hot air ovens should be used. Typical cure conditions are 5-10 sec. at 250°-280°F (web temperature). Line speed and temperature may be adjusted as needed.

Suggested Starting Formulations (15% Solids)

Formula	A	B	C	D	E	F
CRA Level	0%	0%	0%	20%	40%	20%
Catalyst Level	20:1	30:1	38:1	20:1	20:1	38:1
FDA	No	No	Yes	No	No	Yes
SM3200	36	36	36	29	22	29
Water	64	64	64	64	64	64
SM3030	-	-	-	7	14	7
SM3010	1.8	1.2	0.95	1.8	1.8	0.95

Limitations

Standard copy to come

Specifications

FDA STATUS

SM3200 release coating and SM3010 release coating comply with the following FDA regulations:

- 175.320, resinous and polymeric coatings for polyolefin films
- 176.170, components of paper and paperboard in contact with aqueous and fatty foods
- 176.180, components of paper and paperboard in contact with dry foods for use as release surfaces for pressure sensitive adhesives.

Consult applicable regulations for specific conditions of use. SM3200 release coating and SM3010 release coating can be used for direct food contact. SM3030 release coating may only be used as a release coating for pressure sensitive adhesives under regulation 176.180.

Contact Information

Email

commercial.services@momentive.com

Telephone

Americas	Latin America	EMEAI- Europe, Middle East, Africa & India	ASIA PACIFIC
+1 800 295 2392 Toll free*	Brazil +55 11 4534 9650 Direct Number	Europe +390510924300 Direct number	China 800 820 0202 Toll free +86 21 3860 4892 Direct number
+704 805 6946 Direct Number	Mexico +52 55 2169 7670 Direct Number	India, Middle East & Africa + 91 44 71212207 Direct number*	Japan +81 3 5544 3111 Direct number
*All American countries		*All Middle Eastern countries, Africa, India,	Korea +82 2 6201 4600

For literature and technical assistance, visit our website at: www.momentive.com

DISCLAIMER:

THE MATERIALS, PRODUCTS AND SERVICES OF MOMENTIVE PERFORMANCE MATERIALS INC. AND ITS SUBSIDIARIES AND AFFILIATES (COLLECTIVELY “SUPPLIER”), ARE SOLD SUBJECT TO SUPPLIER’S STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT, PRINTED ON THE BACK OF ORDER ACKNOWLEDGMENTS AND INVOICES, AND AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SUPPLIER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING ITS PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. EXCEPT AS PROVIDED IN SUPPLIER’S STANDARD CONDITIONS OF SALE, SUPPLIER AND ITS REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user bears full responsibility for making its own determination as to the suitability of Supplier’s materials, services, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating Supplier’s products, materials, or services will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of Supplier’s standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Supplier. No statement contained herein concerning a possible or suggested use of any material, product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Supplier covering such use or design, or as a recommendation for the use of such material, product, service or design in the infringement of any patent or other intellectual property right.

*SilForce™ is a trademark of Momentive Performance Materials Inc.

The use of the “™” symbol designates registered or unregistered trademarks of Momentive Performance Materials Inc. or its affiliated companies. Momentive and the Momentive logo are trademarks of Momentive Performance Materials Inc.