Technical Data Sheet

# SilForce™ SL4380 Release Coating

## Description

SilForce SL4380 release coating solventless cross-linker consists of reactive hydride-polysiloxanes used to cure solventless and solvent based release coating. The thermal curing solventless release coating system is designed for use in the manufacture of release liners for pressure sensitive tapes and labels. This crosslinker was mainly designed to enhanc the performance of solventless and solvent based release coatings in both paper and filmic substrates. One- and two-side constructions are possible.

## Key Features and Typical Benefits

- Fast, low temperature cure
- Low extractable silicones
- Stable release values
- Excellent anchorage
- Extended bulk bath life
- Use for filmic and paper substrates

## Typical Physical Properties

| Property | Value |
|---|---|
| Type/Use | Cross-linker |
| Viscosity, cps, 25 ºC | 15-55 |
| Density, g/ml | 0.994 |
| Flash Point, closed cup, ºC | 123 |

Typical physical properties are average data and should not be used as or to develop product specifications.

## Potential Applications



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The solventless release coating system containing SilForce SL4380 release coating can be applied by any of the methods now being used commercially for solventless (and solvent based) silicone. These include three rolls differential offset gravure and various multiple smooth rolls configurations. Heat should be applied immediately after coating to initiate cure. Best results are obtained with zoned ovens. Operating the first oven zone at 90-120 °C (200-250 °F) will allow the coating to level, forming a continuous film before cure is initiated. Subsequent oven zones should be sufficiently high to achieve the required web exit temperature. Actual temperatures required for complete cure will be highly dependent on the performance of the oven and machine conditions. In general, minimum web temperature must be maintained a finite time (=dwell time) to obtain complete cure the time being dependent on oven length and the line speed.

**Specifications**

Typical product data values should not be used as specifications. Assistance and specifications are available at the technical service department of Momentive performance materials Silicones.

**FDA Status**

This SilForce SL6000/SL6100/SL6500/SL6700 multi-component system containing SilForce SL4380 release coating as crosslinker complies with 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 and 176.180, components of paper and paperboard in contact with dry foods for use as release surface for HCD-10888 (Rev. 2016-01-13 2:57 PM) Page 1 of 3 pressure sensitive adhesives as long as the platinum content does not exceed 100ppm.

**Containers**

1 kg can
20 kg pails
180 kg drums
950kg tote

**General Instruction for Use**

SilForce SL4380 release coating can be used like the other cross-linkers SilForce



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SL6020-D1 and SilForce SS4300C. Specific information about mixing procedures can be found in technical data sheets of the solventless (and solvent based) products, while specific formulations can be obtained at the technical service department of Momentive Performance Materials Silicones.

**Patent Status**

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

**Product Safety, Handling and Storage**

Correctly stored in its original, unopened container at 25°C or below SilForce SL4380 has a shelf life of 720 days from the date of manufacturing. Please see also use-before/expiry date on product label and certificate.

Customers should review the latest Safety Data Sheet (SDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, emergency service contact information, and any special storage conditions required for safety. Momentive Performance Materials (MPM) maintains an around-the-clock emergency service for its products. SDS are available at www.momentive.com or, upon request, from any MPM representative. For product storage and handling procedures to maintain the product quality within our stated specifications, please review Certificates of Analysis, which are available in the Order Center. Use of other materials in conjunction with MPM products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

SilForce SL4380 cross-linker will generate flammable hydrogen gas upon contact with strong acids, bases or oxidizing agents. Do not reuse the container.

**Limitations**

Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular applications.



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

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