

# Product Information

## Release Agents

# *Molykote*<sup>®</sup> 316

## Silicone Release Spray

### FEATURES

- Meets FDA 21 CFR 175.300 regulations for incidental food contact

### COMPOSITION

- Heat-stable silicone compound

### Release agent for many food and industrial applications

#### APPLICATIONS

For food and beverage industry processing:

- Reduces build-up on heat seal bars, resulting in increased heat transmission and sealing speed; reduced package discoloration; reduced cleaning time
- Releases evaporated milk and powdered milk from evaporator and preheater tubes
- Reduces adhesion of residues on heating coils and cooking kettles
- Helps prevent seizing and jam-ups of conveyor guide rails and scrambler tables
- Facilitates the release of frozen vegetables and fruits from tray and freezer filling spouts
- Reduces adhesion of dried foods (dates, tea cubes, etc.) to drying trays and large cheese wheels to storage shelves
- Hastens the removal of dried food from stove burners and ovens; helps prevent adhesion of grease; makes cleaning stainless steel fixtures and counter tops easier
- Helps prevent glasses from sticking to cooling cones of glass frosting equipment
- Helps sugar release from processing and packaging equipment such as guides, dispensing chutes, table tops, and drying trays

In high-speed rotary letterpress printing:

- Increases metal release from tail sheets
- Allows saw blades, saw tables, and storage trays to work more smoothly
- Reduces sticking of conveyors, pulleys, and valves

In the bindery industry:

- Reduces build-up on glue pots and paste jars
- Makes tables and cutter surfaces slippery, so paper magazines, books, and bundled newspapers can be handled easier

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#### TYPICAL PROPERTIES

Specification Writers: Please contact your local Dow Corning sales office or your Global Dow Corning contact before writing specifications on this product.

Test	Unit	Result
Color		Clear
Drying Time, approximate	minutes	3
Flash Point (Bulk)	°C (°F)	42 (108)
Density (Bulk), at 25°C (77°F)	g/mL	0.75

For flexography applications:

- Helps prevent ink from creeping onto idle rollers used in printing gift wrap, multi-wall bags, and similar applications

In addition to specific industry-related uses, Molykote® 316 Silicone Release Spray also:

- Helps prevent glue from adhering to walls of containers; makes it easier to remove dried glue from equipment
- Promotes removal of hosiery from boarding forms
- Makes ironing easier by reducing friction on hand irons and pressing equipment
- Provides for smooth, easy cutting and reduces binding when applied to the cutting edges of tools; reduces clogging of saw teeth when sawing gummy woods or non-ferrous metals
- Provides for smoother, faster materials handling on chutes, tables, and rollers

## DESCRIPTION

*Molykote* 316 Silicone Release Spray is a heat-stable, silicone anti-stick agent. Effective in solving a wide range of sticking or adhesion problems, it can be used in many industries.

The silicone film formed by *Molykote* 316 Silicone Release Spray resists breakdown due to oxidation, which can leave carbonaceous residues or gummy surfaces. Once dried, it has low volatility at temperatures up to 199°C (390°F).

## HOW TO USE

*Molykote* 316 Silicone Release Spray should be applied to clean surfaces. Clean off any surface residue with a fine emery cloth or scouring powder until the surface is shiny; then wipe with a clean cloth moistened with solvent to remove dirt and abrasive particles.

Methods of application vary, depending upon the size, accessibility, and complexity of the unit to be processed or packaged. Usually, *Molykote* 316 Silicone Release Spray is sprayed in a light film.

Approximately three minutes drying time should be allowed. *Molykote* 316 Silicone Release Spray can also be buffed onto metal surfaces with a hand buffer. Only a thin film is needed for effective release. This film should be restored as required.

Freshly cleaned heat-sealing units, such as irons and bars, should be broken in at full operating temperature for a short period after applying *Molykote* 316 Silicone Release Spray. After any excess has been wiped off, the unit is ready for use.

NOTE: Because *Molykote* 316 Silicone Release Spray has such a wide range of uses, securing or including complete information on those uses, such as reapplication schedules and amount to use, is impractical. For this reason, the suitability of *Molykote* 316 Silicone Release Spray should always be tested before it is adopted for regular use.

## Solubility

*Molykote* 316 Silicone Release Spray is insoluble in water, ethanol, acetone, glycol, and glycerin. It can be dispersed in naphtha.

NOTE: When using any solvent, always provide adequate ventilation. Follow precautions on solvent container label.

## CAUTION

*Molykote* 316 Silicone Release Spray should not be applied to surfaces that will later be painted, since it may interfere with the adhesion of the paint.

## FDA/USDA STATUS

*Molykote* 316 Silicone Release Spray complies with FDA 21 CFR 175.300 covering resinous and polymeric coatings, subject to end user compliance with applicable total extractives limitations. It is also acceptable for use in federally inspected meat and poultry plants (previously designated by USDA H-1 status).

## HANDLING PRECAUTIONS

This product contains a flammable solvent. Do not spray in a confined

space where the possibility of spark ignition exists. This or similar situations could result in a flammability hazard.

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND MATERIAL SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE MATERIAL SAFETY DATA SHEET IS AVAILABLE ON THE DOW CORNING WEBSITE AT WWW.DOWCORNING.COM, OR FROM YOUR DOW CORNING REPRESENTATIVE, OR DISTRIBUTOR, OR BY CALLING YOUR GLOBAL DOW CORNING CONNECTION.

## USABLE LIFE AND STORAGE

When stored at or below 35°C (95°F), *Molykote* 316 Silicone Release Spray has a shelf life of 60 months from date of manufacture. Refer to product packaging for "Use By" date.

## PACKAGING

*Molykote* 316 Silicone Release Spray is supplied in 284-g (10-oz) aerosol cans, 454-g (16-oz) pump spray containers, and 14.1-kg (5-gal) pails.

## LIMITATIONS

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

## SHIPPING LIMITATIONS

DOT Classification: *Molykote* 316 Silicone Release – Combustible liquid; *Molykote* 316 Silicone Release Spray – Flammable gas.

## HEALTH AND ENVIRONMENTAL INFORMATION

To support customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, [www.dowcorning.com](http://www.dowcorning.com), or consult your local Dow Corning representative.

**LIMITED WARRANTY  
INFORMATION – PLEASE  
READ CAREFULLY**

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that Dow Corning's products

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Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

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