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Product Description Sheet

FREKOTE[®] S-50 Mold Release Agent

Industrial Products, October 2003

Description

Loctite[®] Frekote[®] S-50 offers excellent release and slip properties and is recommended for the most demanding silicone rubber molding applications. When properly applied to a preheated surface, this water based product forms a thin, inert, thermally stable coating capable of releasing most types of silicone rubber. Furthermore, S-50 is capable of being diluted with water at a wide range of ratios.

Features

No cure time needed at elevated temperatures
Excellent slip
Non flammable
Low mold buildup
Maximum multiple release
Reduced reject rates
Very low VOC (<2% by weight)

Properties

Appearance	Yellowish liquid
Application Temperature	220°F - 390°F
Odor	Mild/Sweet
Special Cautions	Keep From Freezing !
Specific Gravity	1.00 +/- 0.02
Shelf Life	12 months from the date of manufacture

Mold Preparation

Mold surfaces should be thoroughly cleaned and dried. All traces of prior release agents and contaminants should be removed. This may be accomplished by using Frekote PMC, or other suitable solvents. Heavy build-up will probably require abrasion (e.g., grit, dry ice, sand or glass beading). This will remove build-up or previous release contamination.

Handling

S-50 should **not** be agitated prior to use. Furthermore, pouring S-50 should be done slowly to avoid excessive foaming.

Application 'Consult MSDS Prior To Use'

Apply Frekote S-50 to molds preheated to a minimum of 220°F (104°C). Application of Frekote S-50 is suitable for application up to 390°F (199°C).

Apply Frekote S-50 using a finely atomized fan pattern. Regulate gun output to 2-3 fl. oz./minute for molds heated to 220-300°F or 4-5 fl. oz./minute for molds above 300°F.

At temperatures above 220 °F S-50 does not require a cure time and molding can commence as soon as the water carrier has evaporated.

Initially, two to three coats of full strength S-50 should be applied to condition the mold. Care should be taken to avoid emulsion accumulation and run marks due to over application. Again, the release agent should be completely dry prior to starting production.

Touch Up

Touch up coats should only be applied to areas where poorer release is noticed. This will reduce the possibility of release agent or polymer build up. The frequency of touch up will depend on polymer type, mold configuration, and abrasion parameters. Touch up coats can be done at any concentration between full strength and 7 parts water to one part S-50. Dilution beyond 7:1 is not recommended.

Storage

Frekote S-50 should not be stored above 110°F (40°C). Frekote S-50 is **not** freeze/thaw stable and should not be stored below 32°F (0°C).

Note

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