



1001 Trout Brook Crossing
Rocky Hill, CT 06067-3910
Telephone: (860) 571-5100
FAX: (860) 571-5465

Product Description Sheet

FREKOTE[®] 700-NC

Mold Release Agent

Industrial Products, October 2003

Description

Loctite[®] Frekote[®] 700-NC offers excellent release properties for the most demanding applications and is a great all-purpose release agent. Frekote 700-NC releases epoxies, polyester resins, thermoplastics, rubber compounds and most other molded polymers.

Features

No chlorinated solvents
High gloss and high slip
No contaminating transfer
Versatile - releases most polymers
No mold build-up
Room temperature cure

Properties

Appearance	Clear liquid
Odor	Hydrocarbon
Solvents Aliphatic	Hydrocarbon, Dibutyl Ether
Specific Gravity	0.760 +/- .010
Special Cautions	Moisture sensitive, keep container tightly closed when not in use.
Shelf Life	1 year from date of manufacture
Application Temp	13°C - 135°C (55°F -275°F)
Cured Thermal Stability	400°C (750°F)

Mold Preparation

The mold surface must be clean and free of any release agent or other contaminants for Frekote 700-NC to be completely effective. Remove any contaminants with Frekote PMC or other suitable cleaning solvents. Light industrial abrasives can be used to remove heavy resin build up.

New Molds: Full curing of new molds is advisable to ensure the best bonding of the Frekote to the mold surface. New fiberglass and epoxy molds should be cured per manufacturer's instructions before starting production.

Note: For porous, green or repaired molds, a Frekote Sealer should be used - technical data is available. Consult with your Frekote Representative for assistance.

Application *Consult MSDS prior to use*

Frekote 700-NC can be applied to mold surfaces at room temperature up to 135°C (275°F) by spraying, brushing or wiping with a clean lint-free, cloth. When spraying, ensure a dry air source is used or use an airless spray system. If gel coats are used, a wipe-on-wipe-off method of application is recommended in order to achieve a high gloss finish. If possible, warm the mold prior to applying Frekote 700-NC to approximately 50°C (120°F) to drive off any moisture entrapped on the mold surface.

1. Only a thin wet film is required. Wipe or spray on a smooth, thin, continuous, wet film. Avoid wiping or spraying over the same area that was just coated until the solvent has evaporated. If spraying, hold nozzle 8-10 inches (20-30 cm.) from mold surface. It is suggested that small areas be coated working progressively from one side of the mold to the other.
2. Initially, apply a minimum of two coats, allowing up to 5 - 10 minutes after each application for complete solvent evaporation. The film should be dry and not feel tacky.
3. Once the final coat is applied, the coating should be cured at room temperature for 15-20 minutes
4. Aerosols may sometimes leave a matte surface finish. To enhance gloss, use a cotton cloth to gently buff up dry film, if required.
5. Performance is enhanced by re-coating once, after the first few initial pulls. Maximum releases will be obtained as the mold surface becomes conditioned to Frekote 700-NC.
6. When any release difficulty is experienced, the area in question can be "touched-up" by re-coating the entire mold surface or just those areas where release difficulty is occurring. For temperatures up to 135°C (275°F), use Frekote 700-NC allowing the film to thoroughly dry before continuing molding operation. If application temperatures exceed 135°C (275°F), Frekote 800-NC is recommended.

Note: Touch-up coats applied at regular intervals before the base film breaks down will extend the number of releases obtainable and reduce possible resin attack/build-up.

Precaution: Users of closed mold systems (i.e. rotomolding) must be certain that solvent evaporation is complete and that all solvent vapors have been ventilated from the mold cavity prior to closing the mold. An oil-free compressed air source can be used to assist in evaporation of solvents and ventilation of the mold cavity.

Flammability/ Storage

Frekote 700-NC contains flammable solvents. The product should always be used in well-ventilated areas. Store in a cool, dry place. Keep container tightly closed when not in use.

Note

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the

handling and use thereof. In light of the foregoing, **Loctite Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Loctite Corporation's products. Loctite Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Loctite Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.