



Product Description Sheet

FREKOTE® 770-NC

Mold Release Agent

Industrial Products, October 2003

Description

Loctite® Frekote® 770-NC is a low odor, fast evaporating version of Frekote 700-NC. Frekote 770-NC offers excellent release for various molding applications and can be used as a direct replacement for Frekote 700-NC. Frekote 770-NC can be used for the release of epoxies, polyester resins, vinyl ester resins, thermoplastics, adhesives, and rotationally molded plastics. Frekote 770-NC is particularly well suited for tougher to release processes such as filament winding and non gel coated polyester and fiberglass molding.

Features

Versatile - releases most resins
No contaminating transfer
High gloss and high slip
Room temperature cure
No mold build-up
Low odor

Physical Properties

Appearance	Clear liquid
Odor	Hydrocarbon
Solvents	Aliphatic Hydrocarbon
Specific Gravity	0.720 +/- .015
Shelf Life	One year from date of manufacture
Special Cautions	Moisture sensitive, keep container tightly closed when not in use.
Cured thermal stability	400°C (750°F)
Application Temp	3°C - 60°C (55°F - 140°F)

Mold Preparation

The mold surface must be clean and free of any release agent or other contaminants for Frekote 770-NC to be completely effective. Remove any contaminants with Frekote PMC or another suitable cleaning solvent. 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 full scale production.

Note For porous 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 770-NC can be applied to mold surfaces at room temperature up to 60°C (140°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 possible, warm the mold prior to applying Frekote 770-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 (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 2 - 3 base coats, allowing 5-10 minutes after each application for complete solvent evaporation.
3. Wait 5-10 minutes after the final coat for curing of the polymer resin prior to molding. The film should be dry and not feel tacky.
3. Aerosols may sometimes leave a matte surface finish. To enhance gloss, use a cotton cloth to gently buff up dry film, if required.
4. 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 770-NC.
5. 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 60°C (140°F), use Frekote 770-NC and cure as per instructions above. For mold temperatures above 60°C (140°F), Frekote HMT-2 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 770-NC contains flammable solvents. The product should always be used in well ventilated areas. Store in a cool, dry place. Consult MSDS for complete details.

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.