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Product Description Sheet

FREKOTE® 55-NC

Mold Release Agent

Industrial Products, September 2001

Description

Loctite® Frekote® 55-NC is a faster evaporating and lower odor version of Frekote 44-NC. Frekote 55-NC has the same polymeric base as Frekote 44-NC with only a slight modification in the solvent blend. If non transference of release is important when molding, Frekote 55-NC should be your first choice release agent. This semi permanent, non-migratory release system chemically bonds to the mold surface to form a microthin film which is stable at temperatures exceeding most molding processes. Frekote 55-NC can be used for the release of epoxies (thermosets and prepregs), polyester resins, thermoplastics, adhesives, and rotational molded plastics.

Features

Fast dry time (<1 minute)
Non-contaminating transfer
No mold build-up
High thermal stability
Non-CFC
Low/no odor
Better mold use/productivity

Properties

Appearance	Clear liquid
Odor	Hydrocarbon
Solvents	Aliphatic Hydrocarbon
Specific Gravity	0.720 +/- 0.010
Flash Point	7°C (45°F) Tag Closed Cup
Special Cautions	Moisture sensitive, keep container tightly closed when not in use.
Shelf Life	1 year from date of manufacture
Cured thermal stability	400°C (750°F)
Application Temp	20°C - 60°C (68°F - 140°F)

Mold Preparation

The mold surface must be clean and free of any release agent or other contaminants for Frekote 55-NC to be completely effective. Remove any contaminants with Frekote PMC, PMC Plus or 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 55-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. Always use in a well ventilated area.

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 solvents have evaporated. When 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 2-3 base coats allowing 5 minutes between coats for solvent evaporation.
2. Curing of the final coat takes 30 minutes at room temperature and can be shortened by baking the mold for only 5 minutes at 100°C-150°C (210°F-300°F).
4. Maximum releases will be obtained as the mold surface becomes conditioned to Frekote 55-NC. Performance is enhanced by re-coating once, after the first few initial pulls.
5. When any release difficulty is experienced, the area in question can then be "touched-up" by recoating the entire surface or coating those areas where release difficulty is occurring. For mold temperatures above 60°C (140°F) use HMT-2.

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 55-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. 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.

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