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Product Description Sheet

FREKOTE® 44-NC

Mold Release Agent

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Description

Loctite® Frekote® 44-NC should be your first choice release agent where non transference of release is important. This semi-permanent, non-migratory release system chemically bonds to the mold surface to form a micro thin film which is stable at temperatures exceeding most molding processes. Frekote 44-NC can be used for the release of epoxies (thermosets and preregs), polyester resins, thermoplastics, adhesives, and rotational molded plastics.

Benefits

Better mold utilization
Non-contaminating transfer
No mold build-up
Significantly lower mold maintenance costs

Properties

Appearance	Clear liquid
Odor	Sweet Ether
Solvents	Dibutyl Ether
Specific Gravity	0.770 +/- 0.010
Flash Point	24°C (75°F) Tag Closed Cup
Shelf Life:	1 year from date of manufacture
Cured thermal stability	400° C (750°F)
Application Temp	13° C - 60° C (55°F -140°F)
Special Cautions	Moisture sensitive, keep container tightly closed when not in use. The product should always be used in a well ventilated area.

Mold Preparation

The mold surface must be clean and free of any release agent or other contaminants for Frekote 44-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 44-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.

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.

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 4-6 base coats allowing 10-15 minutes between coats for solvent evaporation.
3. Curing of the final coat takes three hours at room temperature and can be shortened by baking the mold for only 15 minutes at 100-150°C (210-300°F).
4. Maximum releases will be obtained as the mold surface becomes conditioned to Frekote 44-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 be "touched-up" by re-coating the entire mold surface or just those areas where release difficulty is occurring. For mold temperatures above 60°C (140°F) use Frekote HMT.

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.

Note

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