



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

Product Description Sheet

FREKOTE® 810-NC Mold Release Agent

Industrial Products, October 2003

Description

Loctite® Frekote® 810-NC Aerosol is the aerosol version of Frekote 815-NC. Frekote 810-NC Aerosol has been designed to form a semi-permanent release interface on mold surfaces with application temperatures from room temperature to 135°C (275°F). The multiple release non-migratory release system chemically bonds to the mold surface to form a micro thin chemically resistant coating. Frekote 810-NC will release all natural and synthetic organic rubber compounds. It has minimal build-up on the mold surface and exhibits high thermal stability for all molding processes. During touch-up cycles where application temperatures are above 135°C (275°F) we recommend Frekote 800-NC.

Features

Room temperature application
No mold build-up
Maximum mold utilization
Reduced reject rates
Releases most rubber compounds

Properties

Color	Clear liquid
Odor	Hydrocarbon
Solvents	Aliphatic Naphtha
Shelf Life	One year from date of manufacture
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 810-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, 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*

When applying Frekote 810-NC, care should be taken to avoid contact with skin and eyes. Always use in a well ventilated area.

1. Apply a light uniform coat of Frekote 810-NC. Always apply in a well ventilated area and allow complete solvent evaporation. Spray on a smooth, thin, continuous, wet film. Avoid spraying over the same area that was just coated until the solvents have evaporated.
2. Apply a second coat perpendicular to the first, again avoiding pool or run marks due to over application.

3. Allow to fully dry for 10-15 minutes between coats at room temperature.
4. A total of three light coats should be applied. The final coating will cure within one hour at room temperature or the cure process may be accelerated by baking the dried coating at 60°C (140°F) or above for fifteen minutes, i.e. by bringing mold to processing temperature for high temperature processes.
5. Maximum releases will be obtained as the mold becomes conditioned to Frekote. Performance will be improved by applying a touch-up coat of Frekote 810-NC after the first few multiple releases. Frekote 810-NC efficiency may be less in the process involving heavy filled polymers and additional touch-ups may be necessary in such areas.

Touch Up

Touch up coats should be applied at regular intervals determined by the operator. This will depend on the polymer type, mold configuration and abrasion parameters. Touch up coats will maintain the base coats, hence reduce the chance for compound or polymer build-up. In situations where application temperatures fall below 135°C (275°F), Frekote 810-NC is recommended. For application temperatures above 135°C (275°F) Frekote 800-NC is recommended.

Flammability/ Storage

Frekote 810-NC contains flammable solvents. The product should always be used in well ventilated areas. Store in a cool, dry place.

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.

NOT FOR PRODUCT SPECIFICATIONS

THE TECHNICAL DATA CONTAINED HEREIN ARE INTENDED AS REFERENCE ONLY.

PLEASE CONTACT LOCTITE CORPORATION QUALITY DEPARTMENT FOR ASSISTANCE AND RECOMMENDATIONS ON SPECIFICATIONS FOR THIS PRODUCT.
ROCKY HILL, CT FAX: +1 (860)-571-5473 DUBLIN, IRELAND FAX: +353-(1)-451 - 9959

Loctite and Frekote are Registered Trademarks of Loctite Corporation U.S.A.