

LOCTITE® FREKOTE Frewax®

Known as FREKOTE® Frewax®
January 2015

PRODUCT DESCRIPTION

LOCTITE® FREKOTE Frewax® provides the following product characteristics:

Technology	Mold Release
Appearance	White or light creme suspension ^{LMS}
Chemical Type	Solvent Based Polymer
Odor	Hydrocarbon
Cure	Room temperature cure
Cured Thermal Stability	≤280 °C
Application	Release Coatings
Application Temperature	15 to 35 °C
Specific Benefit	<ul style="list-style-type: none"> • High gloss finish • Multiple releases • Minimal mold build-up • Easy application • Low odor • Visible mold coverage

LOCTITE® FREKOTE Frewax® is a unique combination of a wax and a Frekote® semi-permanent polymer release agent. This combination provides the user with the advantages of an easy-to-apply liquid wax and the multiple release performance of a polymer resin. By incorporating a wax into the formulation, a visible film is produced that enables easy, user-friendly application and complete mold coverage. Using LOCTITE® FREKOTE Frewax® provides significant process and labor savings through better mold utilization.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C 0.75 to 0.77^{LMS}
Flash Point - See SDS

GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Safety Data Sheet (SDS).

Mold Preparation

Cleaning:

Mold surfaces must be thoroughly cleaned and dried. All traces of prior release must be removed. This may be accomplished by using Frekote® PMC or other suitable cleaner. Frekote® 915WB™ or light abrasives can be used for heavy build-up.

Directions for use:

1. Shake or stir LOCTITE® FREKOTE Frewax® before use.
2. Apply LOCTITE® FREKOTE Frewax® with a clean, lint free, cotton wiping cloth. Wet the cloth with LOCTITE® FREKOTE Frewax® until it is damp but not dripping.
3. Starting at one end of the mold, wipe a generous wet film over a 91 X 91cm area. Repeat until mold is completely covered.
4. Allow LOCTITE® FREKOTE Frewax® to haze (dry). This usually takes 5 to 10 minutes at 21°C with good ventilation.
5. Check mold for any region that appears uncoated (where haze is not present). If any uncoated areas are observed, reapply product in the above manner.
6. With a clean, lint free, cotton wiping cloth, polish the LOCTITE® FREKOTE Frewax® coated mold until a high gloss is obtained. Change cloth frequently to ensure wax build-up on the cloth is not re-deposited on the mold.
7. Repeat steps another 3 times to give a total of 4 coats. This multiple coat system allows the Frekote® resin to seal any mold pores and give a sufficient film thickness to permit multiple releases.
8. After the final film has been polished, the mold is ready for use.
9. **NOTE:** For large molds (>305 X 305 cm), polishing is generally easier if coating and polishing are accomplished in stages. For example, coat a 305 X 305 cm area, allow to haze, and polish. Repeat with the next area, until entire mold is coated.
10. **NOTE:** Application of LOCTITE® FREKOTE Frewax® at mold temperatures above 35 °C may cause streaking.
11. Apply LOCTITE® FREKOTE Frewax® with a clean, lint free, cotton wiping cloth. Soak cloth with LOCTITE® FREKOTE Frewax® until it is damp but not dripping.

Mold Touch up

Abrasion will gradually cause wear and parts will begin to adhere to the mold surface if a continuous release film is not maintained. It's best to always touch-up the mold at the first sign of diminished release, before release becomes difficult. Simply touch-up the entire mold or apply spot touch-ups to high wear areas following steps 1-3 under directions for use. Only 1 coat is usually required for touch-up. Typically, 15 minutes cure time is required prior to resumption of molding.

Loctite Material Specification^{LMS}

LMS dated September 25, 2007. Test reports for each batch are available for the indicated properties. LMS test reports include selected QC test parameters considered appropriate to specifications for customer use. Additionally, comprehensive controls are in place to assure product quality and consistency. Special customer specification requirements may be coordinated through Henkel Quality.

Storage

The product is classified as flammable and must be stored in an appropriate manner in compliance with relevant regulations. Do not store near oxidizing agents or combustible materials. Store product in the unopened container in a dry location. Storage information may also be indicated on the product container labelling.

Optimal Storage: 8 °C to 21 °C. Storage below 8 °C or greater than 28 °C can adversely affect product properties.

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

Conversions

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mm}$
 $\text{mm} / 25.4 = \text{inches}$
 $\mu\text{m} / 25.4 = \text{mil}$
 $\text{N} \times 0.225 = \text{lb}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{N/mm}^2 \times 145 = \text{psi}$
 $\text{MPa} \times 145 = \text{psi}$
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$
 $\text{mPa}\cdot\text{s} = \text{cP}$

Note:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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Reference 0.1