

LOCTITE® Frekote® 720-NC™

Known as Frekote® 720-NC™
October 2015

PRODUCT DESCRIPTION

LOCTITE® Frekote® 720-NC™ provides the following product characteristics:

Technology	Mold Release
Appearance	Clear liquid ^{LMS}
Chemical Type	Solvent Based Polymer
Odor	Solvent
Cure	Room temperature cure
Cured Thermal Stability	≤400 °C
Application	Release Coatings
Application Temperature	13 to 43 °C
Specific Benefit	• Fast curing • High gloss finish • Easy application • No chlorinated solvents • Multiple releases • High Slip/low surface energy coating

LOCTITE® Frekote® 720-NC™ is formulated specifically as a release agent for all cast polymer products and for releasing highly filled resins. LOCTITE® Frekote® 720-NC™ contains a unique cross-linking polymer designed for cast polymer manufacturers needing to reduce their cycle time by releasing "hot" parts. LOCTITE® Frekote® 720-NC™ is also well suited for certain abrasive, closed molding processes such as RTM and filament winding. Additionally the unique chemistry of this product makes it ideal for application on highly porous mold surfaces.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C 0.757 to 0.771^{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 Loctite® Frekote® PMC or other suitable cleaner. Loctite® Frekote® 915WB™ or light abrasives can be used for

heavy build-up.

Sealing New/Repaired Molds:

Occasionally, green or freshly repaired molds are rushed into service prior to complete cure causing an increased amount of free styrene on the mold surface.

Fresh or "production line" repairs, new fiberglass and epoxy molds should be cured per manufacturer's instructions, usually a minimum of 2 -3 weeks at 22°C before starting full-scale production.

Fully cured previously unused molds should be sealed before use. This can be accomplished by applying one to two coats of an appropriate Frekote® mold sealer, following the directions for use instructions.

Allow full cure of the appropriate Frekote® mold sealer before you apply the first coat of LOCTITE® Frekote® 720-NC™ as outlined in the directions of use.

Directions for use:

1. LOCTITE® Frekote® 720-NC™ can be applied to mold surfaces at room temperature up to 43°C 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.
2. 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 20 to 30cm from mold surface. It is suggested that small areas be coated, working progressively from one side of the mold to the other.
3. Initially, apply 2 to 3 base coats allowing 15 minutes between coats for solvent evaporation .
4. Allow the final coat to cure for 15 minutes at 22°C.
5. Maximum releases will be obtained as the mold surface becomes conditioned to LOCTITE® Frekote® 720-NC™ . Performance can be enhanced by re-coating once, after the first few initial pulls.
6. 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.
7. **NOTE:** LOCTITE® Frekote® 720-NC™ is moisture sensitive, keep container tightly closed when not in use. The product should always be used in a well ventilated area.

Mold Touch up

Touch up coats should only be applied to areas where poor release is noticed and should be applied using the same method as base coats. This will reduce the possibility of release agent or polymer build-up. The frequency of touch ups will depend on the polymer type, mold configuration, and abrasion parameters.

Loctite Material Specification^{LMS}

LMS dated February 05, 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

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

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