

LOCTITE® FREKOTE R-150™

Known as Aqualine® R-150™
January 2015

PRODUCT DESCRIPTION

LOCTITE® FREKOTE R-150™ provides the following product characteristics:

Technology	Mold Release
Appearance	Translucent emulsion ^{LMS}
Chemical Type	Water based emulsion
Odor	Mild
Cure	Heat cure
Cured Thermal Stability	≤315 °C
Application	Release Coatings
Application Temperature	60 to 200 °C
Specific Benefit	<ul style="list-style-type: none"> • Fast curing • Multiple releases • Non-flammable • Freeze/Thaw stable • Excellent slip

LOCTITE® FREKOTE R-150™ offers excellent release and slip properties and is recommended for the most demanding rubber molding applications, especially for highly abrasive compounds. When properly applied to a preheated surface, this water based product chemically bonds to the mold surface to form a thin, inert, thermally stable coating capable of releasing all natural and synthetic rubber compounds as well as thermoplastic urethanes and some solid polyurethane cast elastomers.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C	0.98 to 1.02 ^{LMS}
Flash Point - See SDS	
pH	3.9 to 4.1 ^{LMS}

GENERAL INFORMATION

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.

NOTE: Optimum results will be achieved when molds are cleaned prior to use of LOCTITE® FREKOTE R-150™

Directions for use:

1. Apply LOCTITE® FREKOTE R-150™ to molds pre-heated to a minimum of 60°C. LOCTITE® FREKOTE R-150™ is suitable for mold temperatures up to 200°C.
2. Apply LOCTITE® FREKOTE R-150™ using a finely atomized fan pattern. Regulate the gun output to 60 - 90 ml/minute for molds heated from 60°C - 150°C. Molds above 150°C regulate gun output to 120 - 150 ml/minute.
3. At 60°C, LOCTITE® FREKOTE R-150™ will dry in a few seconds and be fully cured after 25 minutes. At 93°C, cure time is reduced to 10 minutes, and at 150°C LOCTITE® FREKOTE R-150™ dries instantly and required only 4 minutes to fully cure.
4. For hot 121 to 200°C molds, or porous molds, apply a minimum of 6 coats. For temperatures ranging from 60 to 120°C, a minimum of four coats should be applied with care taken to avoid emulsion accumulation and run marks due to over application. Allow time for the release agent to cure prior to production.

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 December 06, 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

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

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 Corporation 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

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

Henkel Corporation in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office.

Reference 0.1

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.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:

In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:

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. 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.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Corporation, Resin Technology Group, Inc., or Henkel Canada Corporation, the following disclaimer is applicable:

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, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel 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 Henkel 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.

Trademark usage

Except as otherwise noted, all trademarks in this document are trademarks of