

LOCTITE® Frekote® Rel-Eaze™

November 2015

PRODUCT DESCRIPTION

LOCTITE® Frekote® Rel-Eaze™ provides the following product characteristics:

Technology	Mold Release
Appearance	Clear and colorless ^{LMS}
Chemical Type	Sacrificial Silicone
Odor	Silicone
Cure	Room temperature cure
Cured Thermal Stability	≤400 °C
Application Temperature	13 to 150 °C
Solids Content	100%
Application	Release Agent
Specific Benefit	• High slip • High gloss finish • Easy application • Multiple releases • Minimal mold build-up

LOCTITE® Frekote® Rel-Eaze™ is a mold release agent that is designed for releasing sand cores from metal tooling in the precision sand casting industry. This product offers easy application and higher number of releases which causes lower product usage and less operator exposure to chemicals.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Density @ 25 °C, g/cm³ 0.96 to 1.0^{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.

Directions for use:

1. Apply LOCTITE® Frekote® Rel-Eaze™ by spraying with a high volume low pressure spray system or by wiping with

a clean, lint free, cotton wiping cloth. Wet the cloth with LOCTITE® Frekote® Rel-Eaze™ until it is damp but not dripping.

2. Wipe a smooth, wet film over the entire mold surface. For larger molds, apply LOCTITE® Frekote® Rel-Eaze™ to the surface one section at a time starting at one end and working towards the other. Continue to work the material into the mold by lightly wiping the wet film (10-30 seconds) until a thin and uniform coating is obtained.
3. If spraying the material, set parameters to 2.0mL/second using a minimum air pressure of 40psi. If using a pressure pot with dual regulation, set pot pressure to a minimum of 10 psi and the air atomization pressure to a minimum of 40 psi.
4. Production may be resumed as soon as the mold surface is fully coated.
5. **NOTE:** For maximum number of releases, determine the threshold of number of parts per cycle and re-apply a touch up coat before release become difficult.

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 01, 2008. 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

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

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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Americas
+860.571.5100

Europe
+49.89.320800.1800

Asia
+86.21.2891.8863

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