FREKOTE®

Aqualine® R-220™

June 2008

PRODUCT DESCRIPTION

Aqualine® R-220™ provides the following product characteristics:

Technology	Mold Release
Appearance	Milky white emulsion
Chemical Type	Water based emulsion
Odor	Mild
Cure	Heat cure
Cured Thermal Stability	≤315 °C
Application	Release Coatings
Application Temperature	60 to 205 °C
Specific Benefit	• Fast curing • Multiple releases • Non-flammable • Freeze/Thaw stable

Aqualine® R-220™ offers excellent release and slip properties and is recommended for the most demanding rubber molding applications, such as EPDM rubber, and will also release thermoplastic urethanes and solid polyurethane cast elastomers. 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.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C	0.95 to 1.06
Flash Point - See MSDS	
pH	3.9 to 4.1

GENERAL INFORMATION

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

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 Aqualine® R-220™

Directions for use:

1. Apply Aqualine® R-220™ to molds pre-heated to a minimum of 60°C. Aqualine® R-220™ is suitable for mold temperatures up to 205°C.
2. Apply Aqualine® R-220™ 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, Aqualine® R-220™ 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 149°C Aqualine® R-220™ dries instantly and required only 4 minutes to fully cure.
4. For hot 120°C - 205°C molds, or porous molds, apply a minimum of 4 coats. For temperatures ranging from 60°C - 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 relase 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.

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

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

(°C x 1.8) + 32 = °F
kV/mm x 25.4 = V/mil
mm / 25.4 = inches
µm / 25.4 = mil
N x 0.225 = lb
N/mm x 5.71 = lb/in
N/mm² x 145 = psi
MPa x 145 = psi
N·m x 8.851 = lb·in
N·m x 0.738 = lb·ft
N·mm x 0.142 = oz·in
mPa·s = cP

Henkel

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

Reference 0.1