



LOCTITE

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Product Description Sheet
FREKOTE® Aqualine® R-150
Mold Release Agent
 Industrial Products, October 2003

Description

Loctite® Frekote® Aqualine® R-150 offers excellent release and slip properties and is recommended for the most demanding 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.

Features

Fast curing
 Excellent slip
 Non flammable
 Low mold buildup
 Maximum number of multiple releases
 Reduced reject rates
 Very low VOC, < 10 g/L
 Freeze/Thaw Stable

Properties

Appearance	White emulsion
Application Temperature	60°C - 204°C (140 - 400°F)
Odor	Mild
Special Cautions	Store below 40°C (104°F).
Specific Gravity	1.00 +/- 0.02
Thermal stability when cured	315°C (600°F)
Shelf Life	12 months from the date of manufacture

Mold Preparation

Mold surfaces must be thoroughly cleaned and dried. All traces of prior release agents and contaminants must be removed. This may be accomplished by using Frekote PMC or other suitable solvents. Heavy build-up will probably require abrasion (e.g., grit sand or glass beading) followed by solvent washing. This will remove polymer build-up or previous release contamination.

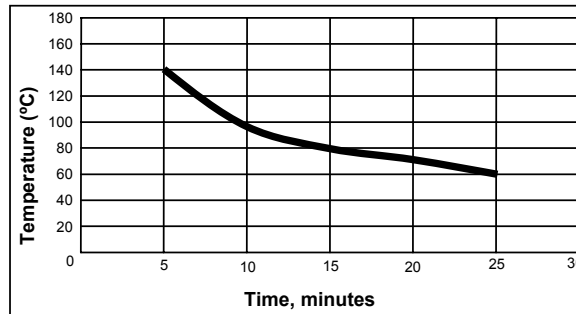
Application *Consult MSDS Prior To Use*

Apply Aqualine R-150 to molds preheated to a minimum of 60°C (140°F). Application of Aqualine R-150 is suitable for application up to 204°C (400°F).

Apply Aqualine R-150 using a finely atomized fan pattern. Regulate gun output to 2-3 fl. oz./minute for molds heated to 60°C - 149°C (140°F - 300°F) or 4-5 fl. oz./minute for molds above 149°C (300°F).

At 60°C (140°F), the release agent will dry in a few seconds and will be fully cured after 25 minutes. At 93°C (200°F), this cure time is reduced to 10 minutes. At 149°C (300°F), Aqualine R-150 dries instantly and requires only four minutes to fully cure (see cure curve).

Cure Time R-150



For hot 121°C - 204°C; (250°F - 400°F), or porous molds, apply a minimum of six coats. For warm 60°C - 121°C (140°F - 250°F), a minimum of four coats should be applied with care being taken to avoid emulsion accumulation and run marks due to over application. Allow time for the release agent to cure prior to production.

Touch Up

Touch up coats should only be applied to areas where poorer release is noticed. This will reduce the possibility of release agent or polymer build up. Again, allow at least 4 minutes at 149°C (300°F), 10 minutes at 93°C (200°F), or 30 minutes at 60°C (140°F) for the touch up coat to cure before continuing production. The frequency of touch up will depend on polymer type, mold configuration, and abrasion parameters.

Storage

Aqualine R-150 should not be stored above 40°C (104°F).

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