

LOCTITE

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Product Description Sheet Frekote[®] Aqualine[®] Rotorelease Mold Release Agent

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Description

Loctite[®] Frekote[®] Aqualine[®] Rotorelease is a unique water based release agent designed to provide multiple releases with no contaminating transfer. Aqualine Rotorelease can be applied to molds at any temperature between room temperature and 205°C (400°F). Aqualine Rotorelease chemically bonds to the mold surface to form a micro-thin, chemically resistant coating capable of releasing most rotationally molded resins. Aqualine Rotorelease is a water-based product that contains no CFC's and no chlorinated, aromatic or petroleum based solvents thus making it one of the safest, non-flammable, lowest VOC products available. When used according to directions, Aqualine Rotorelease gives no mold build-up, allows for easy, multiple releases and exhibits high thermal stability for all molding processes.

Features

No Contaminating Transfer
Very low VOC content
No mixing required
Water-based/Non-flammable
Multiple releases per application
High thermal stability (>230°C; 450°F)
Non-irritating
No mold build-up

Properties

Appearance	White emulsion
Odor	Slight mild odor
Specific Gravity	0.99
Special Cautions	Store below 40°C (104°F)
Shelf Life	6 months from date of manufacture

Mold Preparation

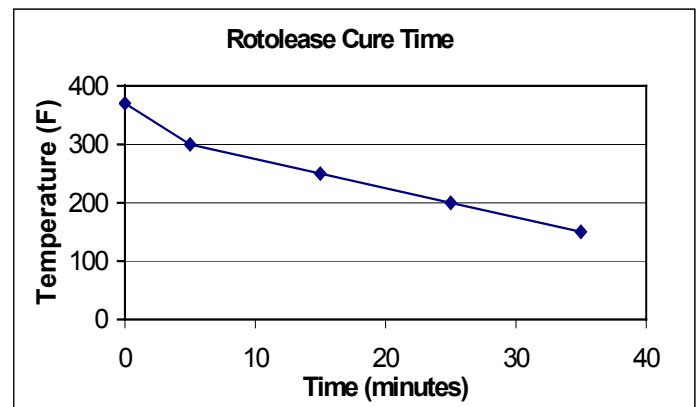
Mold surfaces must be thoroughly cleaned and dried. All traces of prior release agents and contaminants must be removed. This may be accomplished by using Frekote PMC or other suitable solvents. Heavy build-up will probably require abrasion (e.g., grit sand or glass beading) followed by solvent washing.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

Application *Consult MSDS Prior to Use**

Aqualine Rotorelease is designed to be applied to molds at any temperature between 20°C (68°F) and 205°C (400°F). Spray application is recommended, although brushing or wiping may also be used. Optimum multiple release performance is obtained by applying to molds preheated above 60°C (140°F). The ease of release, number of releases/application and surface finish will depend on application technique, mold temperature and number of coats applied.

1. When applying Aqualine Rotorelease to a mold at room temperature (approximately 20°C/68°F), use a minimum of four coats. Allow each coat to dry (approximately 10 minutes) before applying the subsequent coat. The dry time may be decreased, by using a fan or infrared lamps. Post cure the final film for at least 35 minutes at 65°C (150°F), 25 minutes at 93°C (200°F), 15 minutes at 120°C (250°F) or 5 minutes at 150°C (300°F) prior to starting production

2. Care should be taken to avoid emulsion accumulation and running due to over application. If spray application is to be used, high volume, low-pressure spray equipment (HVLP) is recommended to produce optimum transfer efficiency and reduce over-spray. Porous molds should be preheated to a minimum of 60°C (140°F) prior to release agent application.
3. When applying Aqualine Rotorelease to molds above room temperature (>40°C; 104°F), apply a minimum of three coats. Again, allow each to dry before applying the subsequent coat. At 60°C (140°F), Rotorelease will dry in a few seconds; above 100°C (212°F), it will dry instantly. After applying the final coat, allow Rotorelease to post-cure according to the chart below:



Touch-up

The frequency of touch-up will depend on resin type, mold configuration and abrasion parameters. Touch up with Aqualine Rotorelease only to areas where poor release is noticed. Again, allow the touch-up coat to cure, for the minimum time given above, prior to commencing production.

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 applications.

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