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Product Description Sheet

FREKOTE® Aqualine® C-200&C-210

Mold Release Agents

Industrial Products, October 2003

Description

Loctite® Frekote® Aqualine® C-200 is a unique water based release agent designed to provide multiple releases per application with no contaminating transfer. Aqualine C-200 can be applied to molds at any temperature between room temperature and 205°C (400°F). Aqualine C-200 chemically bonds to the mold surface to form a thin, chemically resistant coating capable of releasing all thermoset composites. Aqualine C-200 is a water based product which contains no CFC's and no chlorinated, aromatic or petroleum based solvents thus making it one of the safest, non flammable, very low VOC products available. When used according to directions, Aqualine C-200 gives no mold build-up and exhibits high thermal stability for all molding processes.

Frekote Aqualine C-210 is designed for applications where a hot >60°C, (140°F) mold touch-up is required or where spray application is being utilized. Aqualine C-210 is recommended for use over an Aqualine C-200 base coat. As with the C-200, Aqualine C-210 provides multiple release and no contaminating transfer

Features

No Contaminating Transfer
Reduced reject rate
Very low VOC content
Supplied ready to use; no mixing required
Non-flammable
No CFC's, chlorinated or aromatic solvents
Multiple releases per application
Virtually no mold build-up
Non-irritating

Properties

Appearance	White emulsion
Odor	Slight mild odor
Specific Gravity:	
C-200	0.99
C-210	1.00
Special Cautions	Store below 40°C (104°F)
Shelf Life:	
C-200	6 months from date of manufacture
C-210	12 months from date of manufacture
Cured thermal stability	600°F (315°C)

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 C-200 and C-210 can be applied to molds at any temperature between 20°C (68°F) and 205°C (400°F). (Aqualine C-210 is to be used as a touch-up coat only and as such, should be applied over an Aqualine C-200 base coat.) Spray application is recommended, although brush, wipe or dip techniques may be used. Optimum multiple release performance is obtained by applying to molds preheated to between 40°C (104°F) and 100°C (212°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 C-200 to a mold at room temperature (approximately 20°C/68°F), use a minimum of six 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 40 minutes at 60°C (140°F), 20 minutes at 100°C (212°F) or 15 minutes at 120°C (250°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, low pressure, high volume 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 C-200 to molds above room temperature (40°C or 104°F), apply a minimum of four coats. Again, allow each to dry before applying the subsequent coat. At 60°C (140°F), C-200 will dry in a few seconds; above 100°C (212°F), it will dry instantaneously. Allow 40 minutes at 60°C (140°F), 20 minutes at 100°C (212°F) or 15 minutes at 120°C (250°F) for the final film to cure prior to production.

Touch-up

The frequency of touch-up will depend on polymer type, mold configuration and abrasion parameters. Touch up with Aqualine C-200 only to areas where poor release is noticed. If spray applying to a hot mold >60°C, (140°F), or if release agent build-up is a concern, touch-up with Aqualine C-210. 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.