



1001 Trout Brook Crossing
Rocky Hill, CT 06067-3910
Telephone: (860) 571-5100
FAX: (860) 571-5465

Product Description Sheet

FREKOTE[®] Aqualine[®] R-550

Mold Release Agent

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Description

Loctite[®] Frekote[®] Aqualine[®] R-550 offers excellent release and slip properties and is recommended for the most difficult molding applications, especially for high aspect ratio parts. 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 polymers.

Benefits

- Fast curing
- Low mold buildup
- Excellent slip
- Reduced reject rates
- Very low VOC, <20 g/L
- Maximum multiple releases
- Easier release
- Releases all rubber compounds
- Non flammable
- Freeze/Thaw Stable

Physical Properties

Appearance	White emulsion
Specific Gravity	1.00 +/- 0.015
Solvents	Water
Odor	Mild
Special Cautions	Store below 40°C (104°F)
Shelf Life	6 months from date of manufacture
Cured thermal stability	315°C (600°F)

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

Aqualine R-550 should be spray applied to molds preheated to a minimum of 60°C (140°F) and is suitable for application to molds up to 204°C (400°F).

Apply R-550 using a finely atomized fan pattern. Regulate gun output to 2-3 fluid oz/minute for molds heated to 60°C - 150°C (140°F-300°F) or 4-5 fluid oz/minute for molds above 150°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 150°C (300°F), Aqualine R-550 dries instantly and requires only four minutes to fully cure.

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 150°C (300°F), 10 minutes at 93°C (200°F), or 25 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.

Note

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ROCKY HILL, CT FAX: +1 (860)-571-5473 DUBLIN, IRELAND FAX: +353-(1)-451 - 9959

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