The Frekote® Line of Products is the Brodest Mold Release Line – Frekote® mold release agents, backed by over 40 years of research and development, are the global industry standard for performance, quality and value. By pioneering release solutions for many of the world’s largest manufacturing organizations, Henkel understands what it takes to release the most complex materials in the most demanding applications. Henkel has developed Frekote® mold release agents for virtually all types of composite and rubber molding operations. The Frekote® line offers the broadest product range in the industry. From jumbo jets to tennis racquets, truck tires to o-rings, from custom yachts to bathtubs, we have the release agent you need for most composite and rubber materials.

Lowest Cost per Release – Frekote® semi-permanent release agents minimize fouling and ensure the highest number of releases possible per application. Our customers realize higher productivity and profitability through reduced downtimes, lower reject rates, and higher quality products. Frekote® products are the industry standard replacement for sacrificial release agents. Unlike sacrificial waxes or silicones, Frekote® semi-permanent mold release agents do not transfer to your parts; instead they chemically bond to the mold surface, allowing the parts to release cleanly with no mold release transfer.

Frekote® products are designed to save you money. As an example, the following table represents how polyester molders minimize their molding cost with Frekote® semi-permanent mold release technology:

<table>
<thead>
<tr>
<th>RELEASE PRODUCTS</th>
<th>TRADITIONAL</th>
<th>FREKOTE® BRAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>PASTE WAX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labor time (hours)</td>
<td>10 to 15</td>
<td>6 to 7</td>
</tr>
<tr>
<td>Labor cost</td>
<td>$100 to $150</td>
<td>$60 to $70</td>
</tr>
<tr>
<td>Material cost</td>
<td>$25</td>
<td>$95</td>
</tr>
<tr>
<td>Number of releases</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>Direct cost</td>
<td>$25 to $35</td>
<td>$7.75 to $8.25</td>
</tr>
</tbody>
</table>

Values cited above represent approximated values as of July 2007.

World Standard Products for Release Application – Henkel has found “partnering” with customers is a highly effective way of finding solutions to tough molding and application problems. Customers around the globe turn to Frekote® products not just for our unique mold releases, but also for our expertise in developing “customized” solutions. We take pride in our knowledge, experience, and responsiveness in providing the best technical service to our customers around the globe.
Frekote® Product Selection

This comprehensive guide is designed to make it easy for you to select the right Frekote® mold release agent for a variety of markets and applications. Simply select a suitable release agent for demolding specific substrates and compare the characteristics of different products using the technical data. Choose the compatible dispensing equipment for your application and see the product list for ordering information. For additional assistance, visit www.frekote.com, or call 1-800-562-8483 in the U.S. or 1-800-263-5043 in Canada.

New Frekote® Wipes Now Available!

Several Frekote® mold release agents are now available in easy-to-use, pre-packaged wipes, including Frekote® 44-NC™, 55-NC™ and 710-LV™. See page 16 for ordering information.

www.frekote.com
# Frekote® Release Agents for Advanced Composites Epoxy Systems

## Frekote® 44-NC™
- **No mold build-up**
- **No contaminating transfer**
- **High thermal stability**

Frekote® 44-NC™ is a semi-permanent release polymer designed to provide multiple release for most molding processes without any contaminating transfer. Apply 3 to 6 coats to clean mold surfaces by wiping, brushing or spraying a thin continuous wet film. Allow 15 minutes between coats to dry. Curing of the final coat takes 3 hours at RT and can be shortened by heating the mold for 5 minutes at 212°F to 302°F (100°C to 150°C).

## Frekote® 55-NC™
- **No mold build-up**
- **No contaminating transfer**
- **High slip**

Frekote® 55-NC™ is a semi-permanent release polymer designed to provide multiple release for most molding processes with no contaminating transfer. Apply 3 to 6 coats to clean mold surfaces by wiping, brushing or spraying a thin continuous wet film. Allow 5 minutes between coats to dry. Curing of the final coat takes 5 minutes at RT and can be shortened by heating the mold for 15 minutes at 212°F to 302°F (100°C to 150°C).

## Frekote® 700™-NC
- **Mild odor**
- **Slower RT cure**
- **High slip**

Frekote® 700™-NC is a versatile release agent that provides a high slip where mold geometry problems are encountered. It cures rapidly at RT to give a high gloss finish to molded parts. Apply to clean mold surfaces by spraying, brushing or wiping with a clean, lint-free, cotton cloth. Apply up to 4 coats, allowing 5 to 10 minutes between coats. Touch-up as necessary.

## Frekote® 770-NC™
- **Low odor**
- **Faster RT cure**
- **High slip**

Frekote® 770-NC™ is a versatile release agent that provides a high slip where mold geometry problems are encountered. It cures rapidly at RT to give a high gloss finish to molded parts. Apply to clean mold surfaces by spraying, brushing or wiping with a clean, lint-free, cotton cloth. Apply up to 4 coats, allowing 5 to 10 minutes between coats. Touch-up as necessary.

## Frekote® 710-LV™
- **Fast RT cure**
- **Reduced VOC**
- **High slip**
- **Gloss finish**

Frekote® 710-LV™ is a reduced VOC, semi-permanent release agent formulated specifically for release of high performance composite materials. Frekote® 710-LV™ will release thermoset and prepreg epoxies, polyester resins, and thermoplastic compounds. It cures quickly at room temperature giving a high gloss finish on molded parts. Frekote® 710-LV™ provides a non-contaminating transfer so that parts can be painted or bonded in other assemblies.
**Helpful Hints**

Frekote® B-15™ Mold Sealer is mostly used for metal and epoxy molds.

Frekote® FMS™ Mold Sealer is mostly used for polyester molds.

Frekote® PMC™ is a universal cleaner prior to application of Frekote® Release Agents.

Refer to page 12 for more info.

---

**Filament Winding**

**B-15™ or FMS™**

- Application Temp.: 20°C to 30°C
- Matte Finish
- N/A

---

**Frekote® EXITT™**

- Sacrificial coating
- Silicone based
- High gloss finish

Frekote® EXITT™ provides a superior high gloss finish on molds. It is not recommended for use with parts that need to be painted, bonded, or stained. This product was developed for use with urethane elastomer systems but will also release urethane foams, organic rubber compounds, and most specialty molding resins. No mold build-up, precise retention of mold detail.

---

**Frekote® 720-NC™**

- Water based / Semi-Permanent
- Fast RT cure
- High slip
- Gloss finish
- No mold build-up
- No contaminating transfer

Frekote® 720-NC™ is a semi-permanent release agent formulated specifically for release of all cast polymer products and for releasing highly filled resins. It cures quickly at room temperature giving a gloss finish on finished parts. This product is also suitable for certain abrasive closed molding processes, such as RTM and filament winding, and is also ideal for use on highly porous mold surfaces.

---

**Frekote® 901WB™**

- Water based
- RT cure
- Multiple releases

Frekote® 901WB™ is a spray-on, water based emulsion developed for releasing high performance composite structures commonly found in the aerospace industry. It is cured at room temperature, allowing multiple releases and extremely low VOC content. This product, once cured, can be autoclaved at either 250°F (121°C) or 350°F (177°C). Apply a minimum of 4 thin box coats to a clean mold surface by spraying with a dry air source.

---

**Frekote® C-200™ Aqualine®**

- Water based
- No mold build-up
- No contaminating transfer

Frekote® C-200™ Aqualine® is a water based release agent which provides multiple release with no contaminating transfer. It gives no mold build-up and exhibits high thermal stability for all molding processes. Apply 4 coats to clean mold surfaces at a mold temperature ≥140°F (60°C). Allow each coat to dry before applying subsequent coats. Dry time may be decreased by using a fan or infrared lamp. Post cure the final film for at least 40 minutes at 140°F (60°C) or 20 minutes at 212°F (100°C).

---

**Frekote® EXITT™**

- Sacrificial coating
- Silicone based
- High gloss finish

Frekote® EXITT™ provides a superior high gloss finish on molds. It is not recommended for use with parts that need to be painted, bonded, or stained. This product was developed for use with urethane elastomer systems but will also release urethane foams, organic rubber compounds, and most specialty molding resins. No mold build-up, precise retention of mold detail.

---

**Visit www.frekote.com**
**Frekote® Release Agents for FRP Composites**

**Polyester, Vinyl Ester**

**Product Description**

**YOUR APPLICATION**

**PRODUCT TYPE**

<table>
<thead>
<tr>
<th>SUBSTRATE</th>
<th>FINISH</th>
<th>APPLICATION METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cast Polymer / Solid Surface</td>
<td>Gloss Finish</td>
<td>Wipe On/Buff Out</td>
</tr>
<tr>
<td>Gel-Coat</td>
<td>Gloss Finish</td>
<td>Wipe On/Leave On</td>
</tr>
</tbody>
</table>

**FREKOTE® BRAND SOLUTION**

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>DESCRIPTION</th>
<th>Appearance</th>
<th>Application Temperature</th>
<th>Cure Time Between Coats at 70°F (21°C)</th>
<th>Final Cure Time at RT†</th>
<th>Final Cure Time at 100°C†</th>
<th>Thermal Stability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frewax®</td>
<td>Release Agent</td>
<td>Milky white liquid</td>
<td>59°F to 95°F (15°C to 35°C)</td>
<td>5 to 10 minutes (allow to haze dry)</td>
<td>5 minutes</td>
<td>N/A*</td>
<td>up to 536°F (280°C)</td>
</tr>
<tr>
<td>WOLO®</td>
<td>Release Agent</td>
<td>Clear liquid</td>
<td>59°F to 104°F (15°C to 40°C)</td>
<td>5 minutes</td>
<td>N/A*</td>
<td>N/A*</td>
<td>up to 752°F (400°C)</td>
</tr>
<tr>
<td>SOLO®</td>
<td>Release Agent</td>
<td>Clear liquid</td>
<td>59°F to 113°F (15°C to 45°C)</td>
<td>15 to 20 minutes</td>
<td>15 minutes</td>
<td>N/A*</td>
<td>up to 752°F (400°C)</td>
</tr>
<tr>
<td>FRP-NC™</td>
<td>Release Agent</td>
<td>Clear liquid</td>
<td>59°F to 104°F (15°C to 40°C)</td>
<td>15 minutes</td>
<td>15 minutes</td>
<td>N/A*</td>
<td>up to 752°F (400°C)</td>
</tr>
<tr>
<td>WOLO®</td>
<td>Release Agent</td>
<td>Clear liquid</td>
<td>59°F to 104°F (15°C to 40°C)</td>
<td>15 minutes</td>
<td>15 minutes</td>
<td>N/A*</td>
<td>up to 752°F (400°C)</td>
</tr>
</tbody>
</table>

**Frequate® WOLO™ is also available as a low VOC formulation: Frequate® WOLO-LV™. Visit us on the web at www.frekote.com for more information.**

**Did You Know?**

**Frequate® WOLO™** is a unique polymer release agent that cures quickly and provides multiple releases of all polyester resins. Application and use are simple – wipe it on and allow to evaporate to produce a high gloss finish. No polishing is needed. Apply Frequate® WOLO™ with a clean wiping cloth. Wipe a smooth, wet film over the mold surface. Continue to work the material into the mold by lightly wiping the wet film (10 to 30 seconds) until a thin and uniform coating is obtained and allow to evaporate.

**Frequate® SOLO™** is a unique polymer release agent designed for all gel-coat fiberglass reinforced and filled polyester composites. Application of this product is spray on/leave on using a light and uniform spray pattern to obtain a high gloss finish without polishing. Apply a minimum of 7 coats to a clean mold surface; typically 1 gallon of Frequate® SOLO™ will cover 150 square feet of mold surface.

**Frequate® Frewax®** is a combination of a wax and a polymer release agent. This combination provides the user with the advantages of an easy-to-apply liquid wax and the multiple release performance of a semi-permanent release. Shake Frequate® Frewax® well before and during use. Apply to clean mold surfaces with a clean, lint-free, cotton cloth. Allow Frequate® Frewax® 5 to 10 minutes to haze, then polish the coated mold until a high gloss is obtained. Change cloth frequently; apply a total of 4 coats.

**Frequate® WOLO™** is a unique polymer release agent that cures quickly and provides multiple releases of all polyester resins. Application and use are simple – wipe it on and allow to evaporate to produce a high gloss finish. No polishing is needed. Apply Frequate® WOLO™ with a clean wiping cloth. Wipe a smooth, wet film over the mold surface. Continue to work the material into the mold by lightly wiping the wet film (10 to 30 seconds) until a thin and uniform coating is obtained and allow to evaporate.

**Frequate® FRP-NC™** is a semi-permanent release interface specifically formulated for reinforced polyester gel-coats. It provides minimal mold build-up thus eliminating buffing and cleaning between applications. Apply to clean mold surfaces with a clean cloth. Wipe on a smooth, wet film. Wait 10 to 20 seconds at RT after application. Gently wipe dry with a second dry, cotton cloth. Apply a maximum of 6 coats initially. Allow 15 to 20 minutes cure time between coats and after the final coat at RT.

**Frequate® WOLO™** is a unique polymer release agent that cures quickly and provides multiple releases of all polyester resins. Application and use are simple – wipe it on and allow to evaporate to produce a high gloss finish. No polishing is needed. Apply Frequate® WOLO™ with a clean wiping cloth. Wipe a smooth, wet film over the mold surface. Continue to work the material into the mold by lightly wiping the wet film (10 to 30 seconds) until a thin and uniform coating is obtained and allow to evaporate.
Helpful Hints

Frekote® B-15™ Mold Sealer is mostly used for metal and epoxy molds

Frekote® FMS™ Mold Sealer is mostly used for polyester molds

Frekote® PMC™ is a universal cleaner prior to application of Frekote® Release Agents.

Refer to page 12 for more info.

Visit www.frekote.com
Frekote® Release Agents for Rotational Molding

Frekote® 901WB™
- Water based
- RT cure
- Multiple releases

Frekote® 901WB™ is a spray-on, water based emulsion developed for releasing high performance composite structures commonly found in the aerospace industry. It is cured at room temperature, allowing multiple releases and extremely low VOC content. This product, once cured, can be autoclaved at either 250°F or 350°F (121°C or 177°C). Apply a minimum of 4 thin box coats to a clean mold surface by spraying with a dry air source.

Frekote® C-200™
- Water based
- No mold build-up
- No contaminating transfer

Frekote® C-200™ is a water based release agent which provides multiple release with no contaminating transfer. It gives no mold build-up and exhibits high thermal stability for all molding processes. Apply 4 coats to clean mold surfaces at a mold temperature ≥ 140°F (60°C). Allow each coat to dry before applying subsequent coats. Dry time may be decreased by using a fan or infrared lamp. Post cure the final film for at least 40 minutes at 140°F (60°C) or 20 minutes at 212°F (100°C).

Frekote® 55-NC™
- Fast cure time
- No mold build-up
- Reduced odor

Frekote® 55-NC™ is a semi-permanent release polymer designed to provide multiple release for most molding processes with no contaminating transfer. Apply 3 to 6 coats to clean mold surfaces by wiping, brushing or spraying a thin continuous wet film. Allow 5 minutes between coats to dry. Curing of the final coat takes 30 minutes at RT and can be shortened by heating the mold for 5 minutes at 212°F to 302°F (100°C to 150°C).

Frekote® 901WB™
- Water based
- No mold build-up
- No contaminating transfer

Frekote® 901WB™ is a spray-on, water based emulsion developed for releasing high performance composite structures commonly found in the aerospace industry. It is cured at room temperature, allowing multiple releases and extremely low VOC content. This product, once cured, can be autoclaved at either 250°F or 350°F (121°C or 177°C). Apply a minimum of 4 thin box coats to a clean mold surface by spraying with a dry air source.

Frekote® C-200™
- Water based
- Multiple releases

Frekote® C-200™ is a water based release agent which provides multiple release with no contaminating transfer. It gives no mold build-up and exhibits high thermal stability for all molding processes. Apply 4 coats to clean mold surfaces at a mold temperature ≥ 140°F (60°C). Allow each coat to dry before applying subsequent coats. Dry time may be decreased by using a fan or infrared lamp. Post cure the final film for at least 40 minutes at 140°F (60°C) or 20 minutes at 212°F (100°C).
Helpful Hints

Frekote® B-15™ Mold Sealer is mostly used for metal and epoxy molds.

Frekote® PMC™ is a universal cleaner prior to application of Frekote® Release Agents.

Refer to page 12 for more info.

<table>
<thead>
<tr>
<th></th>
<th>Solvent Based</th>
<th>Water Based</th>
<th>Solvent Based</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>B-15™</strong></td>
<td>Low Temperature Applications</td>
<td>High Temperature Applications</td>
<td></td>
</tr>
<tr>
<td><strong>770-NC™</strong></td>
<td>Release Agent</td>
<td>Release Agent</td>
<td>Release Agent</td>
</tr>
<tr>
<td><strong>901WB™</strong></td>
<td>Clear liquid</td>
<td>White emulsion</td>
<td>Clear liquid</td>
</tr>
<tr>
<td><strong>C-200™</strong></td>
<td>59°F to 140°F (15°C to 60°C)</td>
<td>68°F to 95°F (20°C to 35°C)</td>
<td>59°F to 140°F (15°C to 60°C)</td>
</tr>
<tr>
<td><strong>Aqualine®</strong></td>
<td>5 to 10 minutes</td>
<td>15 minutes</td>
<td>5 to 10 minutes</td>
</tr>
<tr>
<td><strong>770-NC™</strong></td>
<td>5 to 10 minutes</td>
<td>10 minutes</td>
<td>10 minutes</td>
</tr>
<tr>
<td><strong>C-200™</strong></td>
<td>3 hours</td>
<td>40 minutes @ 60°C (140°F) 20 minutes @ 100°C 15 minutes @ 120°C</td>
<td>5 minutes</td>
</tr>
<tr>
<td><strong>Aqualine®</strong></td>
<td>N/A*</td>
<td>N/A*</td>
<td>N/A*</td>
</tr>
<tr>
<td><strong>770-NC™</strong></td>
<td>up to 752°F (400°C)</td>
<td>up to 536°F (280°C)</td>
<td>up to 599°F (315°C)</td>
</tr>
</tbody>
</table>

**Frekote® 770-NC™**
- Fast RT cure
- High gloss and high slip
- Releases most polymers

Frekote® 770-NC™ is a versatile, semi-permanent release agent which provides high slip where mold geometry problems are encountered. It cures rapidly at RT to give a high gloss finish to molded parts. Apply to clean mold surfaces by spraying, brushing or wiping with a clean, lint-free cotton cloth. Apply up to 4 coats, allowing 5 to 10 minutes between coats. Touch-up as necessary.

**Frekote® 901WB™**
- Water based
- RT cure
- Multiple releases

Frekote® 901WB™ is a spray-on, water based emulsion developed for releasing high performance composite structures commonly found in the aerospace industry. It is cured at room temperature, allowing multiple releases and extremely low VOC content. This product, once cured, can be autoclaved at either 250°F or 350°F (121°C or 177°C). Apply a minimum of 4 thin box coats to a clean mold surface by spraying with a dry air source.

**Frekote® C-200™ Aqualine®**
- Water based
- No mold build-up
- No contaminating transfer

Frekote® C-200™ Aqualine® is a water based release agent which provides multiple release with no contaminating transfer. It gives no mold build-up and exhibits high thermal stability for all molding processes. Apply 4 coats to clean mold surfaces at a mold temperature ≥ 140°F (60°C). Allow each coat to dry before applying subsequent coats. Dry time may be decreased by using a fan or infrared lamp. Post cure the final film for at least 40 minutes at 140°F (60°C) or 20 minutes at 212°F (100°C).

**Frekote® 770-NC™**
- Fast RT cure
- High gloss and high slip
- Releases most polymers

Frekote® 770-NC™ is a versatile, semi-permanent release agent which provides high slip where mold geometry problems are encountered. It cures rapidly at RT to give a high gloss finish to molded parts. Apply to clean mold surfaces by spraying, brushing or wiping with a clean, lint-free cotton cloth. Apply up to 4 coats, allowing 5 to 10 minutes between coats. Touch-up as necessary.

Visit www.frekote.com
**Frekote® Release Agents for Rubber Industry**

### Product Types

- **Water Based**
- **Solvent Based**
- **High Temperature Application**
- **Low Temperature Application**
- **High Slip**
- **Highly Filled Elastomers**
- **General Rubber Goods**
- **Technical Rubber** *(i.e. Neoprene, Nitrile)*

#### 815-NC™ (or 810-NC™ Aerosol)
- **Description:** RT cure
- **Appearance:** Clear liquid
- **Application Temperature:** up to 752°F (400°C)
- **Thermal Stability:** up to 752°F (400°C)

#### 800-NC™
- **Description:** No chlorinated solvents
- **Appearance:** Clear liquid
- **Application Temperature:** up to 752°F (400°C)
- **Thermal Stability:** up to 752°F (400°C)

#### R-150™ Aqualine® or R-180™ Aqualine®
- **Description:** Fast curing
- **Appearance:** White emulsion
- **Application Temperature:** up to 599°F (315°C)
- **Thermal Stability:** up to 599°F (315°C)

#### R-220™ Aqualine®
- **Description:** Fast curing
- **Appearance:** White emulsion
- **Application Temperature:** up to 599°F (315°C)
- **Thermal Stability:** up to 599°F (315°C)

#### R-180™ Aqualine®
- **Description:** Fast curing
- **Appearance:** White emulsion
- **Application Temperature:** up to 599°F (315°C)
- **Thermal Stability:** up to 599°F (315°C)

---

**YOUR APPLICATION**

<table>
<thead>
<tr>
<th>SUBSTRATE</th>
<th>PRODUCT TYPE</th>
<th>APPLICATION METHOD</th>
<th>FREKOTE® BRAND SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Rubber Goods</td>
<td>Solvent Based</td>
<td>Low Temperature Application</td>
<td>815-NC™ (or 810-NC™ Aerosol)</td>
</tr>
<tr>
<td></td>
<td>Water Based</td>
<td>High Temperature Application</td>
<td>800-NC™</td>
</tr>
<tr>
<td>Technical Rubber</td>
<td>Water Based</td>
<td>Low Temperature Application</td>
<td>R-150™ Aqualine® or R-180™ Aqualine®</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High Temperature Application</td>
<td>R-220™ Aqualine®</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>R-180™ Aqualine®</td>
</tr>
</tbody>
</table>

**PRODUCT DESCRIPTION**

- **Frekote® 815-NC™ (or 810-NC™ Aerosol)**
  - RT cure
  - Multiple releases
  - No chlorinated solvents
  - Semi-permanent release interface for molding rubber compounds.

- **Frekote® 800-NC™**
  - No chlorinated solvents
  - Maximum mold usage
  - Reduced reject rates
  - Semi-permanent release interface for molding rubber compounds.

- **Frekote® R-150™ or R-180™ Aqualine®**
  - Fast curing
  - High slip
  - Minimum reject rates

- **Frekote® R-220™ Aqualine®**
  - Fast curing
  - Excellent slip
  - Releases most compounds

- **Frekote® R-180™ Aqualine®**
  - Fast curing
  - High slip
  - Minimum reject rates
  - Water-based release agent.

---

*Refer to page 12 for more information on Sealers and Cleaners. • Not Applicable*
Frekote® R-220™ Aqualine®
- Fast curing
- Excellent slip
- Releases most compounds

Frekote® R-220™ Aqualine® is a water based release agent. It offers excellent release and slip properties and is recommended for the most difficult molding applications, especially for high aspect ratio parts. Apply by spraying to clean molds pre-heated to ≥140°F (60°C). For warm molds, 140°F to 248°F (60°C to 120°C), a minimum of 4 coats should be applied. For hot (120°C to 205°C), new or porous molds, apply a minimum of 6 coats. Allow curing prior to production.

Frekote® R-120™ Aqualine®
- Fast curing
- No transfer
- High thermal stability

Frekote® R-120™ Aqualine® is a semi-permanent water based release agent which provides maximum release performance with high slip properties. Apply by spraying to clean molds, pre-heated to ≥140°F (60°C). For warm molds, 140°F to 248°F (60°C to 120°C), a minimum of 4 coats should be applied. For hot (120°C to 205°C), new or porous molds, apply a minimum of 6 coats. Allow curing prior to production.

Frekote® HMT™ or HMT-2™
- Multiple releases
- Minimum reject rates
- No containing transfer

Frekote® HMT™ and Frekote® HMT-2™ are both excellent solvent based release products designed for multiple release applications to hot molds ≥140°F (60°C). Frekote® HMT-2™ is less moisture sensitive than Frekote® HMT™. Brush or spray apply (ensure dry air source) 4 to 6 wet film coatings to clean mold surfaces. Allow a few minutes between coats for solvent evaporation. Cure is completed during solvent evaporation. Molding can commence immediately.

Frekote® S-50™
- Instant cure at elevated temperatures
- Excellent slip
- Maximum multiple releases

Frekote® S-50™ is a unique water based release agent which cures rapidly at elevated temperatures. It offers excellent slip properties and is suitable for the most demanding silicone rubber molding applications. Apply to clean mold surfaces by spraying and ensure a dry air source or airless spray system. Initially, 2 to 3 coats of full strength Frekote® S-50™ should be applied to condition the mold. Touch-up coats should only be applied to areas where poorer release is noticed.

Helpful Hints

Frekote® PMC™ is a universal cleaner prior to application of Frekote® Release Agents.
Refer to page 12 for more info.

Visit www.frekote.com
**Frekote®**

**Sacrificial Mold Releases**

**YOUR APPLICATION**

**SUBSTRATE**

**PRODUCT TYPE**

**APPLICATION REQUIREMENT**

<table>
<thead>
<tr>
<th>FREKOTE® BRAND SOLUTION</th>
<th>DESCRIPTION:</th>
<th>Appearance:</th>
<th>Application Temperature:</th>
<th>Cure Time Between Coats at 70°F (21°C):</th>
<th>Final Cure Time at 70°F (21°C):</th>
<th>Final Cure Time at 100°C:</th>
<th>Thermal Stability:</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXITT-EM™</td>
<td>Release Agent</td>
<td>White emulsion</td>
<td>140°F to 355°F (60°C to 180°C)</td>
<td>Liquid Evaporation (up to 10 min. at RT)</td>
<td>Liquid Evaporation (up to 10 min. at RT)</td>
<td>Liquid Evaporation</td>
<td>up to 500°F (260°C)</td>
</tr>
<tr>
<td>1450™</td>
<td>Release Agent</td>
<td>Light Amber</td>
<td>140°F to 355°F (60°C to 180°C)</td>
<td>Liquid Evaporation (up to 10 min. at RT)</td>
<td>Liquid Evaporation (up to 10 min. at RT)</td>
<td>Liquid Evaporation</td>
<td>up to 500°F (260°C)</td>
</tr>
<tr>
<td>S-50™</td>
<td>Release Agent</td>
<td>Yellowish liquid</td>
<td>220°F to 390°F (104°C to 200°C)</td>
<td>Liquid Evaporation (up to 10 min. at RT)</td>
<td>Liquid Evaporation (up to 10 min. at RT)</td>
<td>Liquid Evaporation</td>
<td>&lt; 392°F (200°C)</td>
</tr>
<tr>
<td>1711™ or 1711-I™</td>
<td>Release Agent</td>
<td>Clear liquid</td>
<td>68°F to 140°F (20°C to 60°C)</td>
<td>Solvent Evaporation (up to 60 seconds)</td>
<td>Solvent Evaporation (up to 60 seconds)</td>
<td>Liquid Evaporation</td>
<td>up to 500°F (260°C)</td>
</tr>
</tbody>
</table>

**PRODUCT DESCRIPTION**

- **Frekote® EXITT-EM™**
  - High gloss finish
  - No mold build-up
  - Precision retention of mold detail
  - Frekote® EXITT-EM™ is a water based silicone emulsion that offers superb release properties, excellent part detail, and provides a water based alternative to solvent based products to meet your specific molding requirements. Frekote® EXITT-EM™ is capable of releasing most thermoset and thermoplastic resins, including polyurethanes and can be applied to steel, aluminum, epoxy, urethane, and ceramic mold surfaces.

- **Frekote® 1450™**
  - Economical use
  - Minimal build-up
  - Easy to clean molds
  - Frekote® 1450™ is a water based solution, specifically formulated for use with resin/asbestos products. It has been extremely effective in releasing resin/asbestos mixtures molded at 302°F to 329°F (150°C to 165°C) as well as automotive disc brake laminings. This product can be diluted from 10:1 to 20:1 which makes it an economical choice for use when a sacrificial product is desired.

- **Frekote® S-50™**
  - Instant cure at elevated temperature
  - Excellent slip
  - Frekote® S-50™ is a water based material designed for excellent slip in the most difficult-to-release silicone rubber applications. Frekote® S-50™ has no required cure time, low VOC, excellent slip, and low mold build-up. This product forms a thin, inert, thermally stable coating capable of releasing many types of silicone rubbers and is capable of being diluted to a wide range of ratios.

- **Frekote® 1711™**
  - Aerosol
  - General purpose
  - High gloss
  - Stable at 500°F (260°C)
  - Frekote® 1711™ and Frekote® 1711-I™ are silicone, solvent based mold release agents that offer a high gloss finish with excellent part detail and mold geometry retention. These products can be applied to steel, aluminum, epoxy, ceramic, and flexible mold surfaces, and are stable up to 500°F (260°C).
Urethanes

Solvent Based

- Rimlease 8™
  - Semi-gloss finish
  - Excellent slip
  - Minimal transfer
  - Formulated specifically for the Reaction Injection Molding (RIM) process.

AC-4368™
- Excellent slip
- Multi-purpose release

EXITT™ or EXITT-I™
- Aerosol
- Silicone based
- High gloss finish

Frekote® EXITT™ and Frekote® EXITT-I™ are sacrificial mold releases, developed specifically for urethane elastomer systems. They give a high gloss finish with a precise retention of the mold detail and no build-up. These products will also release urethane foams, organic rubber compounds, and most specialty molding resins but are not recommended where parts are to be painted, bonded, or stained. Ideally applied at room temperature. Once the solvents have flashed, these coatings are stable up to 482°F (250°C).

LIFFT™ or LIFFT-I™
- Aerosol
- Silicone based
- High gloss finish

Frekote® LIFFT™ and Frekote® LIFFT-I™ provide a semi-gloss finish on molds and allow for easy part clean-up. These products were developed for use with urethane foams and cast elastomers and are recommended for use with parts that need to be painted or bonded.

LIFFT™ or LIFFT-I™
- Aerosol
- Silicone based
- High gloss finish

Frekote® LIFFT™ and Frekote® LIFFT-I™ provide a semi-gloss finish on molds and allow for easy part clean-up. These products were developed for use with urethane foams and cast elastomers and are recommended for use with parts that need to be painted or bonded.

Solvent Based

- Rimlease 8™
  - Semi-gloss finish
  - Excellent slip
  - Minimal transfer

Visit www.frekote.com
# Frekote® Brand Solution

## Sealers & Cleaners, and Specialty Products

### Frekote® Brand Solution

<table>
<thead>
<tr>
<th>FREKOTE® BRAND SOLUTION</th>
<th>Description:</th>
<th>Appearance:</th>
<th>Application Temperature:</th>
<th>Cure Time Between Coats at 70°F (21°C):</th>
<th>Final Cure Time at 70°F (21°C):</th>
<th>Thermal Stability:</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-15™</td>
<td>Mold Sealer</td>
<td>Clear liquid</td>
<td>59°F to 140°F (15°C to 60°C)</td>
<td>30 minutes</td>
<td>24 hours [60 min. at 212°F (100°C)]</td>
<td>up to 750°F (400°C)</td>
</tr>
<tr>
<td>FMS™</td>
<td>Mold Sealer</td>
<td>Clear liquid</td>
<td>59°F to 95°F (15°C to 35°C)</td>
<td>15 minutes</td>
<td>N/A*</td>
<td>N/A*</td>
</tr>
<tr>
<td>PMC™</td>
<td>Mold Cleaner</td>
<td>Clear liquid</td>
<td>68°F to 86°F (20°C to 30°C)</td>
<td>N/A*</td>
<td>N/A*</td>
<td>N/A*</td>
</tr>
<tr>
<td>915WB™</td>
<td>Mold Cleaner</td>
<td>Beige, pasty liquid</td>
<td>68°F to 104°F (20°C to 40°C)</td>
<td>N/A*</td>
<td>N/A*</td>
<td>N/A*</td>
</tr>
<tr>
<td>CMR™</td>
<td>Cleaner / Mold Release</td>
<td>Clear liquid</td>
<td>55°F to 105°F (13°C to 41°C)</td>
<td>15 minutes</td>
<td>N/A*</td>
<td>up to 750°F (400°C)</td>
</tr>
</tbody>
</table>

### PRODUCT DESCRIPTION

#### Frekote® B-15™
- Easy to apply
- Seals mold porosity
- High thermal stability

Frekote® B-15™ mold sealer is formulated to seal mold micro-porosity and light surface scratches. Used in conjunction with other Frekote® products, Frekote® B-15™ provides an excellent base coat, enhancing the release advantages offered. Apply light uniform coats to clean mold surfaces by spraying, brushing, dipping or wiping with a clean, lint-free cotton cloth. Apply a minimum of 2 coats, allowing 30 minutes between coats. The final coating will cure within 24 hours at RT.

#### Frekote® FMS™
- Easy to apply
- Seals mold porosity

Frekote® FMS™ Mold Sealer for fiberglass reinforced polyester, epoxy and other resin-type molds. Use to seal new molds and older molds with micro-porosity and light surface blemishes. An excellent base coat, enhancing the release advantages of all Frekote® products. Apply at RT by wiping on with a clean, dry, lint-free cotton cloth. Wipe on a smooth, wet film; wait 15 to 20 seconds, then gently wipe dry. Apply 1 to 3 coats, allowing 15 to 20 minutes between coats and after the final coat.

#### Frekote® PMC™
- Easy to use
- Eliminates contaminants
- Enhances release effectiveness

Frekote® PMC™ is a special blend of solvents that dissolves and removes wax from composite molds without dulling the surface. Excellent for epoxy and metal mold surfaces as well as brushes and equipment. Apply Frekote® PMC™ to mold surfaces with a clean, cotton cloth. Wax (or other surface contamination) will immediately begin to dissolve and should be removed from the surface with a second clean cloth while the wax is still dissolved in the Frekote® PMC™.

#### Frekote® 915WB™
- High gloss finish
- Minimal mold build-up
- Fast curing/ easy application

Frekote® 915WB™ is a water based cleaner, developed for removing residue from mold surfaces. The high grade surfactants and emulsifiers, along with the combination of fine abrasives, give excellent results without dulling the mold surface. This product is wiped on and allowed to haze dry, much like a conventional wax, then buffed out to a high gloss finish. Frekote® 915WB™ is designed to be applied and buffed at room temperature but the temperature should not exceed 105°F (40°C).

#### Frekote® CMR™
- Easy application
- Fast curing
- High gloss
- No touch-up needed after cleaning

Frekote® CMR™ is a unique polymer release agent containing a special blend of resins and cleaning solvents designed to dissolve and remove polymer, composite, and other residues from polyester molds without dulling the surface. Frekote® CMR™ is highly recommended for cleaning polyester mold surfaces with mold build-up resulting from repeated releases using Frekote® WOLO™. Additional releases can be obtained after cleaning the mold surface without touching up with a traditional mold release agent.

### Application

<table>
<thead>
<tr>
<th>YOUR APPLICATION</th>
<th>PRODUCT TYPE</th>
<th>SUBSTRATE</th>
<th>APPLICATION REQUIREMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sealers</td>
<td>Frekote® Brand Solution</td>
<td>Metal Molds</td>
<td>Solvent Based</td>
</tr>
<tr>
<td>Cleaners</td>
<td>Frekote® Brand Solution</td>
<td>Polyester and Fiberglass Molds</td>
<td>Solvent Based</td>
</tr>
<tr>
<td>Cleaner/Mold Release</td>
<td>Frekote® Brand Solution</td>
<td>Polyester, Epoxy, and Metal Molds</td>
<td>Water Based</td>
</tr>
</tbody>
</table>

### Not Applicable

- Not Applicable
Frekote® Aqualine®
- No mold build-up
- High thermal stability
Frekote® Aqualine® is a water based, semi-permanent release agent formulated for a multiple release system when used with rotationally molded resins. When applied correctly, this product offers no mold build-up, room temperature application, no contaminating transfer, and high thermal stability. When Frekote® Rotolease® is applied at room temperature, the mold surface should be post cured at 149°F (65°C). If molds are >104°F (40°C), apply a minimum of 3 coats, allowing each to dry before subsequent coats are applied.

Frekote® Frewax®
- Easy to use
- Visible release agent
- High gloss finish
Frekote® Frewax® is a combination of a wax and a polymer release agent. This combination provides the user with the advantages of an easy-to-apply liquid wax and the multiple release performance of a semi-permanent release. Shake Frekote® Frewax® well before and during use. Apply to clean mold surfaces with a clean, lint-free, cotton cloth. Allow Frekote® Frewax® 5 to 10 minutes to haze, then polish the coated mold until a high gloss is obtained. Change cloth frequently; apply a total of 4 coats.

Frekote® Rotolease®
- Fast curing
- No contaminating transfer
- Dilutable (2:1)
- Freeze/thaw stable
Frekote® Rotolease® is a water dilutable concentrate that provides a durable release film for most rubber molding applications. Frekote® Rotolease® chemically bonds to the mold surface and is ideal for use with highly abrasive processes, such as polymer concrete molding.

Frekote® EFR™
- Fast curing
- Easy application
- Seals porous flanges
Frekote® EFR™ is designed specifically as a semi-permanent, polymeric release agent for flange sealing on composite molds. Frekote® EFR™ chemically bonds to the mold surface for rigid, cast polyurethane products. Frekote® EFR™ was formulated to form a semi-permanent release coating on the mold surface for rigid, cast polyurethane parts. The multiple release, non-transferring system chemically bonds to the mold surface to form a micro-thin chemically resistant coating. Cures very rapidly on the mold surface, has minimal mold build-up, and high thermal and chemical stability.

Frekote® CUR™
- Fast cure
- No transfer
- Minimal mold build-up
- Multiple releases
Frekote® CUR™ was formulated to form a semi-permanent release coating on the mold surface for rigid, cast polyurethane products. Frekote® CUR™ was designed to be applied to mold surfaces at 68°F to 302°F (20°C to 150°C). The multiple release, non-transferring system chemically bonds to the mold surface to form a micro-thin chemically resistant coating. Cures very rapidly on the mold surface, has minimal mold build-up, and high thermal and chemical stability.

Frekote® PUR-100™
- Non-toxic, water based system
- Freeze-thaw stable
- Multiple releases
- Parts can be painted after molding without preparation
Frekote® PUR-100™ is a proprietary, water based emulsion developed for releasing rigid, high-density polyurethane foam and cast polyurethane parts. This unique formulation is capable of multiple releases from a single application. Parts molded with Frekote® PUR-100™ can be painted without any additional preparation.
Frekote® applicators are state-of-the-art dispensing units for the application of mold release agents. These units combine ergonomic, user-friendly design and reliability. Frekote® applicators are available in two performance categories: Frekote® Adjustable Spraying Equipment and Frekote® Fine Spraying Equipment.

**Frekote® Adjustable Spraying Equipment** – for large volume dispense patterns

### FREKOTE® SPRAY APPLICATORS – Adjustable Volume

The Frekote® Adjustable Spray Applicators are appropriate for many industrial-molding operations. These durable spray applicators have a forged aluminum body and a stainless steel needle and extension. They feature a variable fluid adjustment for higher volume release agent applications. Applicators come standard with a 90 degree air cap. 0 degree and dual 90 degree air caps are offered as optional accessories. Air and Fluid hoses are sold separately.

| Item Number 98183 – Frekote® Adjustable Spray Applicator, 6” |
| Item Number 98184 – Frekote® Adjustable Spray Applicator, 12” |
| Item Number 98185 – Frekote® Adjustable Spray Applicator, 24” |

### FREKOTE® PRESSURE POT – Adjustable Volume

The Frekote® 2 ½ Gallon Pressure Tank is designed to supply any Frekote® release product to a Frekote® Adjustable Spray Applicator. The Frekote® 2 ½ Gallon Pressure Pot is made of galvanized steel and comes equipped with a pressure regulator and disposable polyethylene liners. These liners are required for use with any water based Frekote® product. The reservoir also comes standard with a ¼” male adapter for easy connection to a Frekote® Adjustable Spray Applicator via the recommended fluid and air hoses. A special adapter kit (item # 98338) is available for use with the Frekote® Fine Spray Applicators.

| Item Number 98190 – Frekote® 2 ½ Gallon Pressure Tank |

### FREKOTE® AIR & FLUID HOSES – Adjustable Volume

| Item Number 98186 – 8 ft. Air Hose w/HTC ¼ |
| Item Number 98187 – 8 ft. Fluid Hose w/HTC ¼ |
| Item Number 98188 – 25 ft. Air Hose w/HTC ¼ |
| Item Number 98189 – 25 ft. Fluid Hose w/HTC ¼ |

### FREKOTE® NOZZLES – Adjustable Volume

| Item Number 987157 – Dual 90 Degree Aircap |
| Item Number 987158 – Zero Degree Aircap |
**Frekote® Fine Spraying Equipment** – for fine spray applications where you need greater control and the thinnest of coatings

**FREKOTE® FINE SPRAY APPLICATORS**

Frekote® Fine Spray Applicators are rugged, durable and ideal for spraying semi-permanent mold release agents. This line of high performance spray applicators is especially suited for applications where the cosmetics of your molded part and mold build-up are of concern. The very fine, pre-set atomization and material consumption of these applicators provide a fine, even release agent coating on your molds and eliminates the need for operator adjustment of the spray applicator. This feature greatly improves consistency of part finish and reduces the chance of over application and waste of the release agent. Additionally, these applicators feature easy rotation of the spray extension for effortless 360 degree application. Applicators come standard with a 90 degree air cap and all required air and fluid dual-hoses.

- Item Number 97716 – Frekote® Fine Spray Applicator, 8”
- Item Number 97717 – Frekote® Fine Spray Applicator, 15”
- Item Number 97719 – Frekote® Fine Spray Applicator, 24”

**FREKOTE® FINE SPRAY PRESSURE TANKS**

The Frekote® Fine Spray Pressure Tank is designed to supply any Frekote® release product to a Frekote® Fine Spray Applicator. The Frekote® Fine Spray Pressure Tank comes in either a 5 liter or 10 liter capacity and is made entirely of stainless steel for corrosion resistance and compatibility with water based Frekote® products. In addition, the Frekote® Fine Spray Tank is equipped with both fluid and air pressure gauges and requires no assembly. The reservoir fittings are designed to supply the Fine Spray Duo tube that feeds a Frekote® Fine Spray Applicator.

- Item Number 97707 – Frekote® Fine Spray Pressure Tank, 5 L
- Item Number 97710 – Frekote® Fine Spray Pressure Tank, 10 L
**MATERIALS APPLICATION GUIDE**

<table>
<thead>
<tr>
<th>FREKOTE® BRAND</th>
<th>POLYMER</th>
<th>44-NC</th>
<th>55-NC</th>
<th>75-NC</th>
<th>770-NC</th>
<th>800-NC</th>
<th>850-NC</th>
<th>C-200</th>
<th>901WB</th>
<th>FRELAX™</th>
<th>HP-NC</th>
<th>HMT™</th>
<th>HMTP™</th>
<th>R-110™</th>
<th>R-120™</th>
<th>R-150™</th>
<th>R-180™</th>
<th>R-500™</th>
<th>S-50™</th>
<th>WOL0™</th>
<th>WOLO-AS™</th>
<th>SOLO™</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy (Non Gel-Coat)</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polyester Gel-Coat – Glossy</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polyester Gel-Coat – Matte</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polyester Gel-Coat / Resin – Low Shrink</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polyamide (PA / Resin)</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polyamide (PA / Gel-Coat)</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polyethylene (PE)</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polypropylene (PP)</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vinyl Ester</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Butyl</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPDM</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HNBR</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neoprene</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrile</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silicone</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thermoplastic Urethane (TPU)</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vamac</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vilon</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cast Polymer / Solid Surface</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compression / Transfer / Vacuum Bagging</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Filament Winding</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hand Lay up / Spray up</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injection Molding</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rotational Molding</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rubber-to-Metal Bonding</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tire Treads</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TROUBLE SHOOTING GUIDE**

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete failure to obtain release</td>
<td>Insufficiently cleaned mold surface has prevented Frekote® from bonding to the mold</td>
<td>Strip out part; thoroughly clean mold and reapply Frekote®</td>
</tr>
<tr>
<td>Poor release accompanied by white patches on parts</td>
<td>Insufficiently cleaned mold surface that prevents Frekote® from bonding properly, resulting in transfer to parts</td>
<td>Thoroughly clean mold and reapply Frekote®</td>
</tr>
<tr>
<td>Poor release accompanied by discoloration blems/patches on parts</td>
<td>Solvent based Frekote® contaminated by use of synthetic application cloths and contaminants applied to tool surface</td>
<td>Thoroughly clean mold and reapply Frekote®, ensuring the use of non-synthetic application cloths</td>
</tr>
<tr>
<td>Poor release in high-draft areas</td>
<td>Lack of slip due to mold geometry to difficult high-draft areas</td>
<td>Apply one or two extra coats of Frekote® or touch-up coats with Frekote® WOL0-AS™</td>
</tr>
<tr>
<td>Inability to achieve multiple releases</td>
<td>Unconditioned mold surface</td>
<td>Reapply Frekote® frequently for initial production shift; thereafter gradually decrease the frequency of application</td>
</tr>
<tr>
<td>Good release but build-up of Frekote® on mold surface</td>
<td>Overapplication of Frekote®</td>
<td>Thoroughly clean mold and reduce amount of Frekote® applied</td>
</tr>
<tr>
<td>Good release but parts exhibit white blemishes</td>
<td>Excessive Frekote® applied to mold, resulting in transfer to parts</td>
<td>Thoroughly clean mold and reduce amount of Frekote® applied</td>
</tr>
</tbody>
</table>

For technical product assistance, call 1-800-562-8483 in the U.S. or 1-800-263-5043 in Canada.
### Ordering Information/Index

#### SOLVENT BASED, SEMI-PERMANENT PRODUCTS AND DEALERS

<table>
<thead>
<tr>
<th>FREKOTE PRODUCT</th>
<th>ITEM NUMBER</th>
<th>CONTAINER SIZE</th>
<th>PIECES PER CASE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>44-NC**</td>
<td>83434</td>
<td>1 gallon can</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>44-NC Wipes</td>
<td>83435</td>
<td>16 fl. oz. can</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>44-NC Wipes</td>
<td>83436</td>
<td>1 gallon pail</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>44-NC Wipes</td>
<td>83437</td>
<td>5 gallon drum</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>44-NC Wipes</td>
<td>83438</td>
<td>1 gallon can</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>1 gallon can</td>
<td>83439</td>
<td>5 gallon drum</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

#### CLEANERS

<table>
<thead>
<tr>
<th>FREKOTE BRAND PRODUCT</th>
<th>ITEM NUMBER</th>
<th>CONTAINER SIZE</th>
<th>PIECES PER CASE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>55-NC**</td>
<td>83440</td>
<td>1 gallon can</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>55-NC Wipes</td>
<td>83443</td>
<td>16 fl. oz. can</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>55-NC**</td>
<td>83444</td>
<td>1 gallon can</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>55-NC**</td>
<td>83445</td>
<td>5 gallon drum</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

---

1. **Available in 3rd quarter of 2007.**
2. *Visit www.frekote.com for more information on these products.*
Headquarter Locations

**USA**
Henkel Corporation
Engineering Adhesives
1001 Trout Brook Crossing
Rocky Hill, Connecticut 06067
1.800.562.8483
www.frekote.com
www.henkelna.com
Tel: 860.571.5100
Fax: 860.571.5465

**Canada**
Henkel Canada Corporation
Engineering Adhesives
2225 Meadowpine Blvd.
Mississauga, Ontario L5N 7P2
Tel: 1.800.263.5043 (within Canada)
Tel: 905.814.6511
Fax: 905.814.6522

**Mexico**
Henkel Capital, S.A. de C.V.
Bvd. Magnocentro No. 8
Piso 2 Interlomas
52760, Huixquilucan
Edo. de México
Tel: 01.800.90.181.00 (within Mexico)
Tel: +52.55.3300.3644
Fax: +52.55.5787.9404

**South America**
Henkel Ltda.
Rua Karl Huller, 136 – Jd. Canhema 09941-410
Diadema/SP, Brazil
Tel: 0800.12.23.34 (within Brazil)
Tel: 55.11.4075.8955
Fax: 55.11.4075.8887

**Europe**
Henkel KGaA
Henkelstraße 67
40191 Düsseldorf, Germany
Tel: +49.211.797.0
Fax: +49.211.798.4008

**Asia**
Henkel Asia-Pacific & China Headquarters
No.928 Zhang Heng Road
Zhangjiang Hi-Tech Park,
Pudong
Shanghai 201203
P. R. China
Tel.: +86 21 2891 8000

Visit the web for immediate access to:
- Distributor Information
- Material Safety Data Sheets
- Technical Data Sheets
- Product Literature

For technical product assistance, call 1-800-562-8483 in the U.S. or 1-800-263-5043 in Canada.