







COMPOSITES FOR CZECH s.r.o. KOMPOZITY PRO VÁS

<u>Pobřežní</u> 249/46, <u>Karlín</u> - Praha 8, 186 00, IČ 047 21 870, <u>DIČ</u> CZ04721870 <u>www.composites4c.cz</u>

# Chemlease<sup>®</sup> SK-3

Semi permanent release agent for composites

### Description

Chemlease<sup>®</sup> SK-3 is a unique rapid-cure, semi permanent mold release system developed specifically for the polyester molding industry, designed to be sprayed or wiped on to the mold surface.

### **Benefits**

- Does not build up on the mold surface
- Reduces labor time and costs
- Multiple releases between applications
- · Easy to apply
- Provides excellent gloss
- High temperature stability

# **Typical Properties**

These are typical values and should not be used to set specifications

Appearance	Clear fluid
Density, kg/l	0.73
Solid Content	0.3%
Storage stability in unopened	12
containers valid from date of	
manufacturing (months)	

### **Mold Preparation**

1. Warm water wash the mold to be treated. Dry thoroughly.

2. Clean the mold surface at least twice with Chemlease<sup>®</sup> Mold Cleaner EZ (see Chemlease<sup>®</sup> Mold Cleaner EZ product data sheet).

3. Seal mold with the appropriate Chemlease® Sealer. Use clean, dry 100% cotton cloths for cleaning, sealing, and for applying the release coats (we recommend our Chemlease Cotton Cloth). Chemlease® Sealer should be used to treat new molds, repair areas and to reduce porosity.

# Application for base coats:

1. Mold surface must be thoroughly cleaned to remove all traces of wax, release agents, and other sealers.

2. Surface should be dry and free of contaminants.

3. When spraying, use an HVLP spray gun. Spray Nozzle #89 (Binks) is the suggested spray nozzle. Air Nozzle #95-P (Binks) is the suggested air nozzle. When applying with a cotton cloth, simply wipe on a 60cm x 60 cm section and immediately wipe off with a second clean, dry, 100%, cotton cloth.

4. Keep gun 20 cm to 25 cm away from the mold surface.

5. Apply 5 coats one after another. If applied by air gun,

no waiting between coats is necessary. If wipe applied, allow the release agent to cure for 10 minutes in between coats.

6. After last coat is applied, allow 30 minutes for cure before gel coating.

(**NOTES:** For optimum performance, we recommend that you keep the Air Pressure at 2,4 - 3,4 bar and the Pot pressure at 0,14 to 0,20 bar).

### Test to ensure proper application:

Attach a small strip of masking tape to different areas of the mold. There should be very little resistance when removing the tape if proper release is applied. Compare to an untreated mold.

### Touch up coats:

Once in production the release film will begin to wear. Rather than applying a touchup coat once the parts begin to stick it is better to do preventative maintenance. For example, if trials determine that 20 releases are obtainable between touchup coats, it is better to reapply **one** touch-up coat after every 15 cycles or at the end of every second shift if you are, for example, turning the molds 8 times per shift. The action described above will keep the molds in production longer and help establish a routine of quality preventative maintenance.

# Coating patch repairs:

Prior to repairing a patch, make sure the release is removed thoroughly from around the area to be repaired. Note: Semi permanent releases must be removed with

mild abrasion as well as a solvent wipe. If not, the patch will not bond to the surface and "break out". Once the patch is cured, treat the patch area as a new mold:

1. Warm water wash - no detergent is necessary.

2. Clean with Chemlease<sup>®</sup> Mold Cleaner EZ two times or more to remove compounds, etc.

3. (Optional) apply one coat of Chemlease<sup>®</sup> 15 Sealer and cure per instructions;

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4. Apply five coats of Chemlease<sup>®</sup> SK-3 Mold Release Agent and cure. If wipe applied, allow the release agent to cure for 10 minutes in between coats.

5. Touch up the patched area with Chemlease<sup>®</sup> SK-3 every other cycle for the first 4-6 releases. Remember, the patch is weaker than the rest of the mold and will require extra attention for the first few cycles. Further, a touchup coat (other than patch repair) should usually be done over the whole mold. This prevents having to retouch another area that is wearing on the next cycle. However, there may be some areas of surface draft, etc. that may require a touch up more frequently.

### For example:

• Touch up complete mold every 16 cycles;

• Touch up small areas with bad draft every 8 cycles. Chemlease<sup>®</sup> SK-3 is designed to blend into itself very easily and operator experience will quickly determine the number of cycles between spot and complete touchup.

### Important

The recommended number of coats and cure times are a general guideline found to be more than sufficient in a broad spectrum of molding conditions. When molding products with extreme geometries or experiencing lowhumidity conditions in the shop, the customer may find the need to extend the cure time between coats and increase the number of coats applied to the mold. The efficiency of a release film is best determined through a combination of tape tests and experimentation.

# Storage

Store in a ventilated area away from potential sources of ignition. Do not store at temperatures above 50°C. Prolonged exposure to higher temperatures may reduce product stability and/or performance. If stored in cold temperatures, allow to warm to room temperature before using.

It is important that the materials be left in the factory containers, as the product is susceptible to moisture contamination if the container is left open or the material is stored in the wrong type of container. The material should always be clear. Do not use, if the use by date (see label on container) has been exceeded.



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### Handling

For more information on storage, handling, hazards, etc., please request a copy of Chem-Trend's Material Safety Data Sheet, which must be consulted prior to use of this product.

### Packaging

Product is available in a variety of packaging. Please contact our customer service team for details.

# Further Information

Request information on our complete range of materials for this industry.

# Legal Notice

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