# Chemlease®

Mould Release Systems



Solid Surface & Cultured Marble | Fiberglass-Reinforced Plastic | **RTM** | Advanced Composites

#### Chemlease® RTM Release System

Resin Transfer Moulding. For all its many benefits, RTM creates the most difficult environment in release agent performance today.

# Chemlease<sup>®</sup> has developed a revolutionary, leading-edge release system designed to address the following:

# The chemically abrasive RTM resins

- that destroy most release films
  Mould build-up and "scumming" that plague other release products
- Mould configurations and low-shrink resins that mechanically abrade the release film

### The Chemlease® RTM Release System has the tenacity, chemical resistance, durability and lubricity required for RTM including:

- Superior mould sealing capability, eliminating the effect of porosity
- Easier multiple releases for better production output
- Virtually no transfer to the moulded part, resulting in less post-mould cleaning
- Increased mold use between touch-ups, vastly reduced downtime

#### **Application Data for Superior Release**

#### Step 1: Internal Release Agent

Chemlease<sup>®</sup> IM02 is an internal release agent that retards mould build-up and assists the demoulding process for each part. Add 0.1-1.0% by weight IM02 to resin followed by a 15-minute mix. Always consult your resin supplier before adding an internal release agent.

#### Step 2: Clean (choose one)

Chemlease<sup>®</sup> Mould Cleaner 1000W is a water-based cleaner formulated to remove waxes, buffing compounds and semi-permanents including sealers and top coats.

Chemlease<sup>®</sup> Mould Cleaner EZ is a heavy duty, solvent-based cleaner formulated to dissolve waxes and buffing compounds without removing the semi-permanent coating layer.

#### Step 3: Prime

Chemlease® MPP 712 EZ is a unique, heavy-duty mold primer and chemically inert sealer with no release agent characteristics. The product is designed to fill areas with bad porosity, particularly new moulds and repaired areas on the B face.

#### Step 4: Seal

Chemlease® 15 Sealer EZ is a high-performance sealer formulated to condition mould surfaces, reducing porosity and acting as a protective barrier for new or reconditioned moulds. This product does have multiple release characteristics

#### Step 5: Top Coat (choose one)

Chemlease<sup>®</sup> PMR-90 EZ is a high-slip release agent that enhances the overall gloss of Class A surface finishes while the durable film provides multiple releases.

Chemlease<sup>®</sup> R&B EZ is a high slip release agent, designed for non-cosmetic parts where resin is in direct contact with the mould surface, which provides multiple releases like the B face mould.

Note: These are general application guidelines. Please consult your local Chemlease representative and individual product Data Sheets and Material Safety Data Sheets for specific storage, handling and application instructions.

# **COMPOSITE SELECTOR GUIDE**

# **Product Application**

	application type	number of coats	cure time between coats (minutes)	final cure time prior to molding (minutes)
Top Coats – Class A Finish (High Gloss)				
Chemlease <sup>®</sup> PMR-90 EZ	wipe on and wipe dry for high gloss	3 to 5	15	30
Chemlease <sup>®</sup> PMR EZ	wipe on and wipe dry for high gloss	3 to 5	15	30
Chemlease <sup>®</sup> One FS <sup>™</sup> EZ	wipe on, allow to dry	3 to 5	15	30
Chemlease <sup>®</sup> 2185	wipe on, buff off	5	dry	30
Chemlease® 75 EZ	wipe on and wipe dry for high gloss	3 to 5	15	30
Chemlease <sup>®</sup> 2172	wipe on and wipe dry for high gloss	3 to 5	15	30
Top Coats – Non-Class A Finish				
Chemlease <sup>®</sup> R&B EZ	wipe on°	3 to 5	15	30
Chemlease® 41 EZ	wipe on °	3 to 5	15	30
Specialty Top Coats				
Chemlease <sup>®</sup> One FS™ EZ	spray on	3 to 5	0	30
Chemlease <sup>®</sup> 2191W	wipe on <sup>°</sup>	3 to 5	10	60
Chemlease® 2196W	wipe on and buff for high gloss	5 to 7	15	60
Chemlease <sup>®</sup> FC-500	spray on only for masters and plugs	5	dry	dry
Sealers and Primers				
Chemlease <sup>®</sup> 15 Sealer EZ	wipe on and wipe dry for high gloss	1 to 2	15	60
Chemlease® MPP 712 EZ	wipe on and wipe dry for high gloss	1 to 2	30	60
Internals				
Chemlease® IM02	add to resin	N/A	N/A	N/A
Cleaners				
Chemlease <sup>®</sup> Mould Cleaner EZ	wipe on, wipe off	N/A	N/A	N/A
Chemlease® Mould Cleaner 1000W	wipe on, wipe dry	N/A	N/A	N/A

#### ¤ = Wiping off excess material will enhance part appearance

**bold green** = The highlighted products are the first recommendation for RTM, however the choice is not restricted to these upon the process parameters and requirements. Please consult with the Chem-Trend representative for advice before choosing the right system.

Note: When experiencing low humidity conditions in the shop, the customer may find the need to extend the time between coats and increase the number of coats applied to the mould.

While the technical information and suggestions for use contained herein are believed to be accurate and reliable, nothing stated in this bulletin is to be taken as a warranty, either expressed or implied. Please refer to individual data sheets for further application, safety and handling information.

Chem-Trend UK +44.(0)870.3504.708

**Chem-Trend Poland** 

+48.61.64.64.855

Chem-Trend Italy +39.02.9881.41

Chem-Trend France +33.169.138100 Chem-Trend Germany +49.40.429550 North +49.8142.4170 South

www.chemtrend.com

