



Value-Adding Release Systems for Automotive Composites Applications

a brand of
 **FREUDENBERG**

 **Chem
Trend**

Release Innovation™

We improve your operating efficiency



As a global leader in the technology of mould release agents, cleaners and sealers, Chem-Trend offers value-adding solutions that reduce cost and improve quality and productivity.



Markets served



Composites



Die Cast



Polyurethane



Rubber



Thermoplastics



Tire



Wood Composite



- Water-based and solvent-based systems
- Mould cleaners
- Mould preparation primers
- Mould sealers
- Mould release agents
 - Semi-permanents
 - Internal mould release

Mould cleaners:

- Water-based or solvent-based
- Essential for ensuring contaminant-free mould surface and subsequent bonding of semi-permanent release agents
- Quick and effective cleaning without damage to mould surface



Primers & sealers:

- Water-based or solvent-based
- Ideal for all closed moulding processes
- Help minimise buildup & keep moulds in production longer
- Extend semi-permanent release agent durability
- Prolong the ROI on composite moulds
- Restore older or damaged tooling, without replacement or expensive refurbishment
- Minimise tool imperfections and help retain vacuum integrity
- Defend tooling from damage and extend tool life

Semi-permanent release agents:

- Water-based or solvent-based
- Multiple releases, less time spent applying release agents
- Low buildup, less time spent cleaning moulds
- Low transfer to part, easier preparation for post-moulding painting or bonding
- Sprayable products for automated application systems
- Wipe on products that deliver high-gloss surface finish
- Variable slip levels available depending on moulding parameters

Internal mould release agents:

- Reduce in-cavity buildup
 - Extends time between mould cleaning cycles
- Enhance release
- Extend durability of external release agent
- Are suitable for use with polyester, epoxy and PU resins
- Provide minimal impact on physical properties



- High productivity system for high-speed automotive processes
- Chemlease[®] & Zyvax[®] High Pressure RTM system:
 - Mould preparation primer
 - Mould sealer
 - Semi-permanent
 - Internal release agent
- Maximises the number of good parts made between release agent application and cleaning cycles
- Minimises the post-moulding part treatment
- Maximises part cosmetics

Application

- Application ease and speed
- Safe handling

Mould productivity

- Increased time between mould cleaning cycles
- Less mould maintenance and repair

Customer Value

Labour time

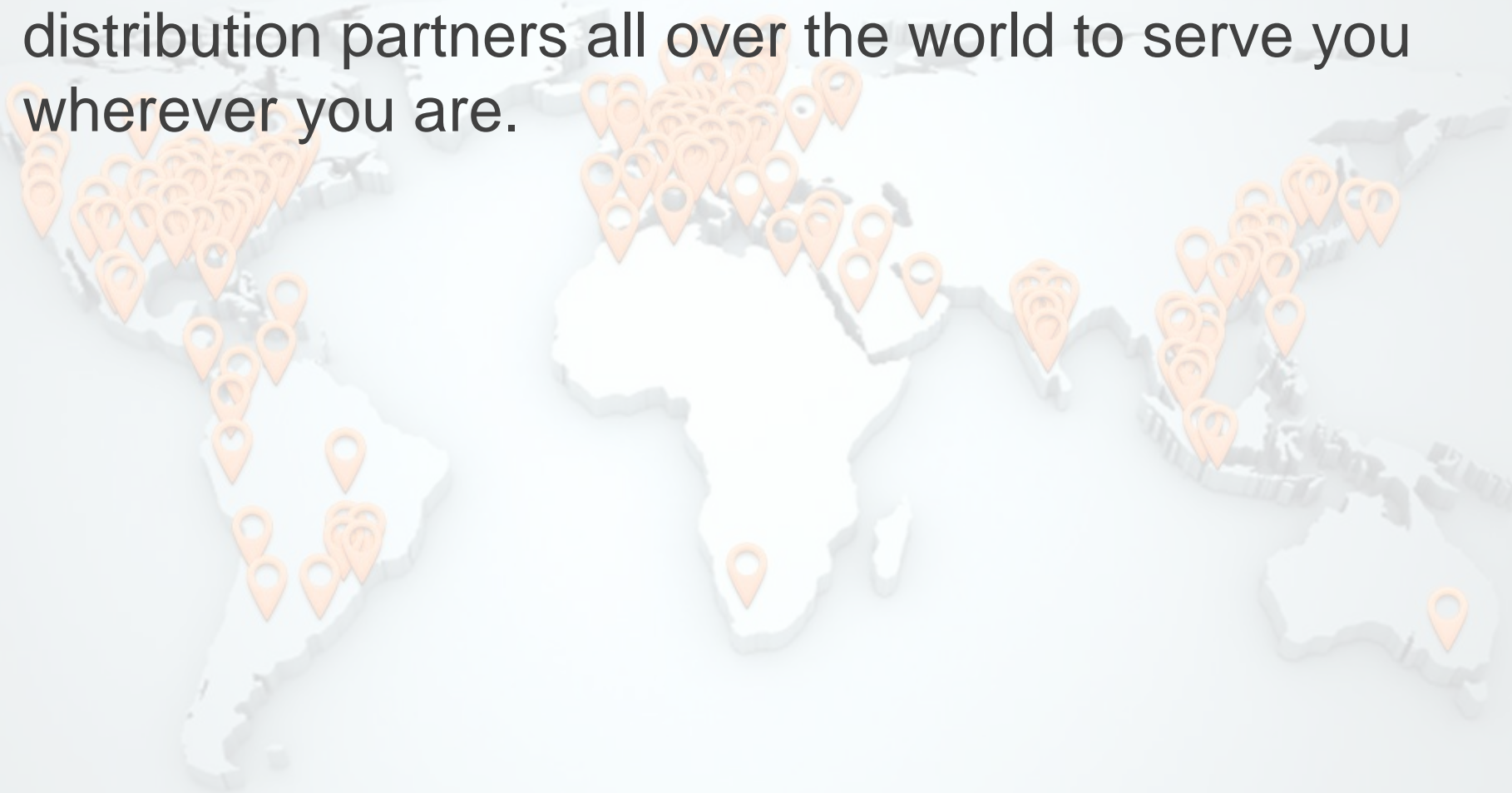
- Multiple releases
- Suitable for automatic application
- Easy demoulding

Part quality

- Fewer surface defects
- Part surface finish control
- Minimal post-finishing



Offices, manufacturing facilities, laboratories and distribution partners all over the world to serve you wherever you are.



Automotive Composites Industry Trends

High volume
production

Lower
environmental
impact

Innovative
materials and
processes

Supply chain
globalisation

Our Innovation Response

Release systems that offer:

- Highly durable release
- Low VOC emissions
- Global chemical inventory compliance
- Ease and speed of application
- Maximised process productivity
- Uncompromising quality, whatever the moulding material

Value, performance and dependability delivered through insight, focus, hands-on knowledge and strength

- Industry knowledge
- Industry-dedicated R&D and technical support teams
- Singular focus on release agent solutions
- Support on your production floor
- Globally integrated to serve you where you are
- Market leader positioned for continued growth
- Sustainable approach to business



Release Innovation™

THANK YOU