

PURGING COMPOUNDS | CLEANING AGENTS | LUBRICANTS | PROTECTIVE AGENTS | RELEASE AGENTS



Lusin<sup>®</sup> professional products for  
thermoplastic molding applications

# Building a reputation

For nearly fifty years, Chem-Trend's reputation has been built on a foundation of providing value and service. Our products and people have proven themselves to not only help our customers make better parts, but more of them. Chem-Trend has a singular focus of formulating and manufacturing innovative chemical specialties for use in the thermoplastic, die casting, polyurethane, rotational molding, tire, composite, general rubber and rotational molding industries. By becoming directly involved in the customer's process Chem-Trend applies its knowledge and development expertise to provide the customer with customized solutions to problems and to improve productivity. At the core of its business are industry-standard mold release agents, die lubricants, tire paints and purging compounds engineered to maximize productivity while delivering high-quality finished parts.

But working with Chem-Trend's Thermoplastic team goes far beyond just obtaining product.

Chem-Trend is committed to bringing premier Lusin® brand purging compounds, mold cleaners, mold release agents and mold maintenance products to the world's thermoplastic industry. Our manufacturing facilities cover the world, with sales and service offices in 17 countries, and a global distribution network offering our products and services to meet the needs of the thermoplastic industry, as well as the unique needs of our customers and their processes.

Chem-Trend's Thermoplastic technical center, located in Maisach, Germany, with additional product development laboratories in North America and South America, is an excellent example of Chem-Trend's commitment to providing our customers with greater value. Seasoned industry chemists and technicians from different parts of the world work together in our worldwide Thermoplastic operation to develop and refine innovative, advanced process technologies. Chem-Trend's test facilities house pilot machines that allow us to simulate a production environment for product development and quality testing before products reach the customer. This is an investment we've made so that our customers know when they choose Lusin® they have a product that truly has been around the world and is ready to go to work for them.

Our sales professionals are on the front lines, presenting our product development team with the thermoplastic molding challenges faced by our customers from all parts of the world. Process experts themselves, our sales professionals work with our technical experts to develop product technologies that meet the specific needs of the customer. This ensures customer satisfaction by focusing on productivity and performance of our products in support of our customers' manufacturing processes. It's an approach that has taken us to the forefront of the industry, and the one thing that has provided our customers with the best service and support available in the industry today. To further support our customers and foster a stronger relationship, our professionals are available to consult with customers on ways to maximize productivity and performance of our products and our customers' processes.

Putting it all together — that's quality.

That's the value of Chem-Trend.



# Cleaning Agents Protective Agents Lubricants



## An extension of your resources

### Lusin® Clean L 21

Lusin® Clean L 21 is especially suitable for the rapid removal of tenacious resins and the dissolution of other polymer residues e.g. PVC, PA, polyamides, acrylates, etc. from metal mold surfaces.

### Lusin® Protect G 31

Lusin® Protect G 31 is used as an anticorrosive for lubricant areas in the textile industry, as well as in machine building and apparatus-producing industries; for machinable or non-machinable plastics and metal forming; as an anti-corrosive and lubricant for machine parts, tools, molds, bearings, guide rails, chains of plastic, paper, textile and foodstuff processing machines; as an anticorrosive and lubricant for cutting blades for film, paper and cardboard processing; and for corrosion protection of machine components and tools during sea transport below deck and during extended transport periods. Lusin® Protect G 31 contains UV-sensitive pigments, which make the protective film visible under ultraviolet light.

### Lusin® Lub PZO 152

Lusin® Lub PZO 152 is a non-staining lubricating and assembly paste resistant to high pressure and protects against corrosion. Lusin® Lub PZO 152 achieves a maximum lubricating effect at temperatures up to 150 °C. Lusin® Lub PZO 152 prevents stick slip, and is resistant to hot water, steam, alkaline and acid media. In addition, it spreads easily and has a long-term effect. The spray version contains an eco-friendly propellant.

[www.chemtrend.com](http://www.chemtrend.com)

Molders of thermoplastic parts know that it's all about high-quality parts at high volume production. Chem-Trend can respond to that need at every step in the process with Lusin® brand products, which not only get the parts out of the mold, but protect the molds from corrosion and humidity, and keep the machinery operating optimally.

**All Lusin® cleaning agents, protective agents and lubricants are highly recommended for the following thermoplastic processes:**

- Injection Molding
- Blow Molding
- Extrusion (Film)
- Extrusion (Sheet, Profile, Pipe, Wire & Cable)
- Compounding

#### **Clean your way to greater efficiency.**

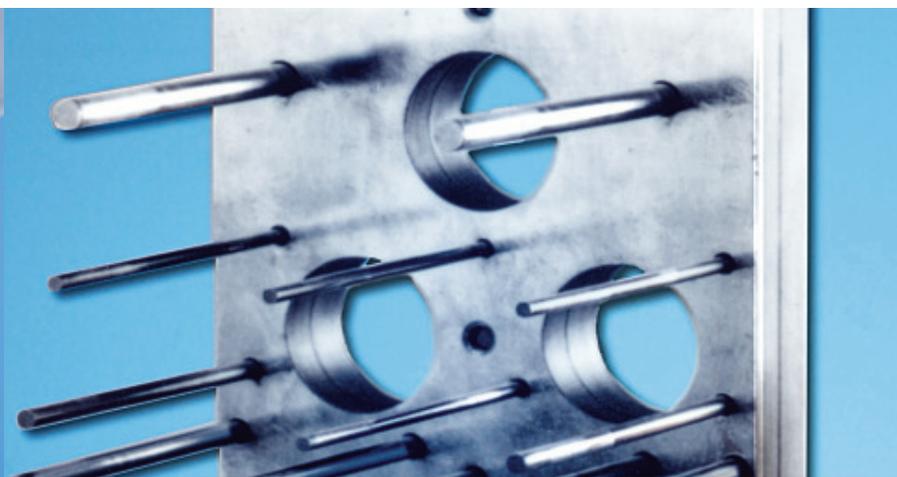
Lusin® cleaning agents remove plastic residues from molds and dies, including residues caused by cracking. They provide for time-saving production processes, dimensional accuracy of plastic parts and moldings, and flawless surface structure while preserving machine components inside and outside.

#### **Protect the tools that matter.**

To assure that dies and molds are always ready to go into production, a complete range of anti-corrosion agents provides dies with long-term protection. Lusin® anti-corrosion agents keep your dies and molds in working order by providing dies, molds and parts with long-term protection against corrosion, humidity and contaminants.

#### **Lubricate your molds with confidence.**

Lusin® non-staining lubricants keep production running smoothly. With Lusin® lubricants, your moving parts will continue to move smoothly and prevent damage due to breakage and seizing.



<h1>Lusin<sup>®</sup></h1> <p><b>CLEANING AGENTS</b> <b>PROTECTIVE AGENTS</b> <b>LUBRICANTS</b></p>		Ultrasonic cleaning	Non-flammable Aerosol	NSF registered	2002/72/EG registered	Mold cleaner	Degreaser	Rust remover	Anticorrosion	Long-term durability	Lubricant for ejector pins	High temperature lubricant (≥300 °C/572 °F)
Product	Supply form											
Lusin <sup>®</sup> Clean L 21	Aerosol / Bulk					●						
Lusin <sup>®</sup> Clean L 101F	Aerosol / Bulk	●	●	●		●						
Lusin <sup>®</sup> Clean L 11	Aerosol / Bulk						●					
Lusin <sup>®</sup> Clean L 51	Aerosol / Bulk						●					
Lusin <sup>®</sup> Clean L 52 F	Aerosol / Bulk		●	●			●					
Lusin <sup>®</sup> Clean W 81	aqueous Bulk	●					●					
Lusin <sup>®</sup> Clean W 101	aqueous Bulk	●				●						
Lusin <sup>®</sup> Protect G 11/G 12*	Aerosol / Bulk								●	◐		
Lusin <sup>®</sup> Protect O 45 F	Aerosol / Bulk			●				○	●	◐		
Lusin <sup>®</sup> Protect G 31/G 32*	Aerosol / Bulk								●	●		
Lusin <sup>®</sup> Protect O 41	Aerosol / Bulk							●	◐	○		
Lusin <sup>®</sup> Lub UH1 96-402	Aerosol / Paste			● <sup>1</sup>						◐	◐	◐
Lusin <sup>®</sup> Lub PZO 152	Aerosol / Paste								◐	●	●	
Lusin <sup>®</sup> Lub PM 1001	Aerosol / Paste									●		●
Lusin <sup>®</sup> Cable spray	Aerosol									◐		
Lusin <sup>®</sup> Silicone CE	Bulk									●		
Lusin <sup>®</sup> Lub PY 300 F	Paste									●	●	●
Lusin <sup>®</sup> Lub OY 181	Aerosol								◐	●		
Lusin <sup>®</sup> Lub OW 32F (MT 09-079)	Bulk									●		

\*red <sup>1</sup>Aerosol only ● highly recommended/yes ◐ medium recommended ○ suitable

**Anticorrosion agent**  
Anticorrosion agents are used to protect metal surfaces against the attack of water, oxygen or other corrosive agents which is commonly known as rust.  
Corrosion not only damages metal surfaces but also weakens and finally deteriorates their properties.  
Anticorrosion agents are currently based on oils or waxes that are combined with highly active corrosion inhibitors.

**Mold Cleaner and Degreaser**  
Mold cleaners mainly are organic liquids that are intended to remove deposits of thermoplastic resins, colors and miscellaneous additives from moulds or any other metal surfaces. Normally mold cleaners are implemented into the process of preventative maintenance.  
Degreasers are applied to remove contaminations (e.g. waxes, oils, greases) from metal, glass or plastic surfaces without attacking or etching them.

# Release Agents

## Releasing innovative products upon the industry

### Lusin<sup>®</sup> Alro OL 151

Lusin<sup>®</sup> Alro OL 151 is a silicone-free universal release agent for all thermoplastics except polycarbonates and ABS, for which we recommend Lusin<sup>®</sup> Alro OL 141, which is also silicone-free.

Lusin<sup>®</sup> Alro OL 151 is a base of synthetic oils and additives for application at mold temperatures up to 150 °C/302 °F.

#### Special Properties:

- Excellent release and slip effect combined with high pressure resistance
- Long cycle times — multiple demolds possible
- Water solubility
- Subsequent treatment of parts, such as lacquering, printing, gluing is possible (preliminary test is recommended)

#### High-quality release agents and operating supplies for modern injection-molding

Lusin<sup>®</sup> Alro release agents ensure trouble-free molding, save time, shorten cycle times, are gentle on dies and molds, and reduce scrap. They have proven themselves in the most difficult thermoplastic and thermoset molding applications.

#### All Lusin<sup>®</sup> Alro release agents are highly recommended for the following thermoplastic processes:

- **Injection Molding**
- **Blow Molding**
- **Extrusion (Film)**
- **Extrusion (Sheet, Profile, Pipe, Wire & Cable)**
- **Compounding**

Chem-Trend offers Lusin<sup>®</sup> Alro release agents in both silicone-based and silicone-free formulations.

- Silicone-based release agents offer advantages in their long cycle times and excellent release properties.
- Silicone-free products are recommended for moldings that have to be painted, imprinted or otherwise treated after demold.



The Lusin® brand of release agents are available in silicone-based, silicone-free formulations.

<h1>Lusin®</h1> <h2>RELEASE AGENTS</h2>		Application temperature < 200 °C/392 °F	Application temperature 200-300 °C/392-572 °F	Application temperature > 300 °C/572 °F	NSF registered	2002/72/EG registered	Polyolefins	PS	SAN, ABS, ASA	PVC	PTFE, PVDF	PMMA	POM	PA6, PA66, PA610, PA11, PA12	PC	PET, PBT	PPO, PEEK, PPS, PES, PSU	CA, CAB, CP	TPU
Product	Supply form																		
silicone free	<b>Lusin® Alro OL 151</b>	<b>Aerosol/Bulk</b>	●				●	●		●	●	●	●	●		●		●	●
	Lusin® Alro OL 152	Aerosol/Bulk	●				●	●		●	●	●	●	●		●		●	●
	<b>Lusin® Alro OL 141</b>	<b>Aerosol/Bulk</b>	●				○	○	●			○	○		●				
	Lusin® Alro OL 154	Aerosol	●				○	○	●	○	○		○		●	○			
	Lusin® Alro OL 202 F	Aerosol		●		●	●	●		●		●	●	●		●	●	●	●
	Lusin® Alro LL 261 <sup>2</sup>	Aerosol/Bulk		●			●	●	●	●		●	●	●		●	●	○	●
	Lusin® Alro LL 301 <sup>2</sup>	Aerosol		●	●			●		●		●	●	●			●		●
	Lusin® Alro OL 401	Aerosol			●														
silicone based	Lusin® Alro O 152 S	Aerosol/Bulk	●				●	●	○	●	●	●	●	●		●		●	●
	Lusin® Alro O 153 S	Aerosol/Bulk	●		●		●	●	○	●	●	●	●	●	●	●		●	●
	<b>Lusin® Alro OL 153 S</b>	<b>Aerosol/Bulk</b>	●				●	●		●	●	●	●	●		●		●	●
	Lusin® Alro OL 201 S	Aerosol/Bulk		●			●	●		●	●	●	●	●		●		●	●
	Lusin® Alro HL 251 S	Aerosol/Bulk		●			●			●		●	●	●		●		●	●
	Lusin® Alro HL 252 S	Aerosol/Bulk		●			●			●		●	●	●				●	●

<sup>1</sup> Registered according to European legislation  
<sup>2</sup> PTFE base  
<sup>3</sup> Registration is pending

● highly recommended/yes   ○ medium recommended   ○ suitable

Release Agents  
 Release agents are highly sophisticated instruments that facilitate the demolding of plastic parts from molds.  
 Release agents can be divided into:  
 - Silicone free release agents  
 - Silicone containing release agents  
 - Dry release agents mainly based on PTFE.

# Purging Compounds

## Ready-to-use purging compounds

### Lusin® Clean G 315

Lusin® Clean G 315 is a ready-to-use granular compound for the cleaning of screws, cylinders and nozzles of thermoplastic injection molding machines and extruders. This product is acceptable for use in the food industry where there is no possibility of food contact. The compound consists of high-grade plastic with additives and contains no abrasives. Lusin® Clean G 315 is suitable for use at a temperature up to 315 °C/599 °F and for the cleaning of hot runners, especially for plastics with low melt index.

When applied at the correct material temperature, Lusin® Clean G 315 is odorless and rapidly removes crusts and deposits from screws, cylinders and nozzles.

All of Chem-Trend's Lusin® brand non-abrasive chemical purging compounds are safe for hot runner systems.

### Purging granulates with real power

Lusin® Clean G provides the ideal cleaners for thermoplastic injection molding machines and extruders with no smoke or odor. The granulate form cleaners contain no abrasives and allow fast, effective purging of injection molding machines with low material consumption.





Chem-Trend's Lusin® brand non-abrasive purging compounds allows molders faster resin color changeovers with virtually no abrasion to system components.

<h1>Lusin®</h1> <h2>PURGING COMPOUNDS</h2>		Injection Molding	Blow Molding	Extrusion (Film)	Extrusion (Sheet, Profile, Pipe, Wire & Cable)	Compounding	Pass filter	Hot runner suitable	NSF registered	Polyolefins	PS	SAN, ABS, ASA	PVC	PTFE, PVDF	PMMA	POM	PA6, PA66, PA610, PA11, PA12	PC, PC/ABS	PET, PBT	PPO, PEEK, PPS, PES, PSU, LCP	CA, CAB, CP	TPU, TPE	Temperature range > 300 °C/572 °F	Temperature range 180-300 °C/356-572 °F	Temperature range 120-250 °C/248-482 °F
Product	Supply form																								
Lusin® Clean G 320	granulates	●				○	●	●	●	○	●	●	○	●	●	●	●	○	●		●	○	●	●	
Lusin® Clean G 315	granulates	●			●	●	●	●	●		○			○	○		●	○				○	●	●	
Lusin® Clean OH 311	granulates	●			●	●	●	●	○	○	○		●		○	○	●					●	○	●	○
Lusin® Clean OH 251	granulates	●			●	●			●	○		●				○	○					●		○	○
Lusin® Clean G 410	granulates	●				○	●	●	●											●		○	●	●	○
Lusin® Clean 1500 <sup>1</sup>	granulates	●				●	●	●	●						○		○	●	○			○	●	●	
Lusin® Clean G 295 C <sup>2</sup>	granulates	●					●	●	●	○	●								○				○	●	●
Lusin® Clean G 300	granulates	○	●		●		●	●	●	●	●	●	●		●	●	●	○	●	●	●		●	●	●
Lusin® Clean G 301	granulates	○	●		●		●	●	●	●													●	●	●
Lusin® Clean LD 250	granulates	○*		●	○		●	●	●	●		●					○							●	

In case of material change from A to B purge with Lusin® purging compound suitable for A

<sup>1</sup> concentrate (25% Lusin® Clean 1500 / 75% virgin resin)

<sup>2</sup> concentrate (30% Lusin® Clean G 295 C / 70% virgin resin)

\* Caps and Closure

● highly recommended/yes

○ medium recommended

○ suitable





## High-quality food-grade products



Our products are subjected to stringent controls and meet the demands of packaging in the foodstuff sector. Review the product overview charts to find the right food-grade product for your process.

### **Lusin® Clean L 101 F**

Cleaner

Ready-to-use mold cleaner designed especially for removal of polymer residues

### **Lusin® Clean L 52 F**

Degreaser

Ready to use degreaser for the whole production area.

### **Lusin® Alro OL 202 F**

Release Agent

Silicone-free release agent suitable for mold temperatures up to 200 °C/392 °F

### **Lusin® Alro O 153 S**

Release Agent

Universal silicone release agent for plastic and rubber processing for use up to 150 °C/302 °F mold temperature

### **Lusin® Lub UH1 96-402**

Lubricant

Metal-free lubrication for temperatures up to 1200 °C/2192 °F

### **Lusin® Protect O 45 F**

Anti-corrosion Agent

Grease-based anti-corrosive for the temporary protection of all metal surfaces; repels water



### Lusin® Clean G 320

Purging Compound  
Suitable for all plastics up to a processing temperature of 320 °C/608 °F

### Lusin® Clean G 315

Purging Compound  
Especially suitable for all plastics with low melt index up to a processing temperature of 315 °C/599 °F

### Lusin® Clean G 295 C

Purging Compound  
Especially developed for caps and closures production at temperatures up to 295 °C/563 °F

### Lusin® Clean G 410

Purging Compound  
Suitable for all plastics up to a processing temperatures between 250 and 410 °C (482-770 °F)

### Lusin® Clean G 300

Purging Compound  
Ready-to-use for screws, cylinders and heads of blow molding machines and extruders up to a processing temperature of 300 °C/572 °F

### Lusin® Clean G 301

Purging Compound  
Ready-to-use, developed for cleaning injection screws, cylinders and blow molding dies for polyolefins up to a temperature of 300 °C/572 °F

### Lusin® Clean LD 250

Purging Compound  
For high quality single and multi-layer film extruders at temperatures up to 250 °C/482 °F

Lusin® FOOD-GRADE PRODUCTS		NSF registered	2002/72/EG registered
Product	Supply form		
Lusin® Clean L 101 F	Aerosol / Bulk	●	
Lusin® Clean L 52 F	Aerosol / Bulk	●	
Lusin® Protect O 45 F	Aerosol / Bulk	●	
Lusin® Lub UH1 96-402	Aerosol	●	
Lusin® Alro OL 202 F	Aerosol		●
Lusin® Alro O 153 S	Aerosol / Bulk	●	
Lusin® Clean G 320	Granulates	●	
Lusin® Clean G 315	Granulates	●	
Lusin® Clean G 410	Granulates	●	
Lusin® Clean G 295 C	Granulates	●	
Lusin® Clean G 300	Granulates	●	
Lusin® Clean G 301	Granulates	●	
Lusin® Clean LD 250	Granulates	●	



## A world of support

### Chem-Trend brings global expertise to each customer:

- Leading-edge thermoplastic development laboratories
- Manufacturing facilities on five continents
- Sales and service offices in 17 countries
- Distribution network across more than 50 countries
- Around-the-clock product support available

#### Chem-Trend LP

##### Chem-Trend North America

Global Headquarters  
Howell, MI USA  
Tel: 517.546.4520  
Fax: 517.546.8910  
psales@chemtrend.com

##### Chem-Trend Brazil

Southern Hemisphere Headquarters  
Valinhos, Sao Paulo, Brazil  
Tel: +55.19.3881.8220  
Fax: +55.19.3881.8222  
sales@chemtrend.com.br

##### Chem-Trend India

India Headquarters  
Bangalore, India  
Tel: +91.80.4124.0201  
Fax: +91.80.4124.0209

##### Chem-Trend Germany

European Headquarters  
Maisach, Germany  
Tel: +49.8142.417.0  
Fax: +49.8142.1588.4  
lusin@chemtrend.de

##### Chem-Trend Singapore

Asia-Pacific Headquarters  
Singapore  
Tel: +65.6736.0113  
Fax: +65.6736.0655  
sales@chemtrend.com.sg

##### Chem-Trend Japan

Japan Headquarters  
Osaka, Japan  
Tel: +81.66.225.1285  
Fax: +81.66.225.1286

For more information about Chem-Trend and our locations in other countries, please visit us at [www.chemtrend.com/locations.asp](http://www.chemtrend.com/locations.asp).



*Release Innovation<sup>®</sup>*

Chem-Trend Limited Partnership

©2009 Chem-Trend L.P.

Howell, Michigan USA

Ph: 800.746.4773

Ph: 517.546.4520

Fax: 517.546.8910

[www.chemtrend.com](http://www.chemtrend.com)