Chem Trend

Release Innovation™

LUSIN® RANGE OF PRODUCTS

MOULD MAINTENANCE

- Cleaners & Degreasers
- Mould Protectants (Anticorrosion)
- Lubricants

RELEASE AGENTS

Issue: 20. October 2020

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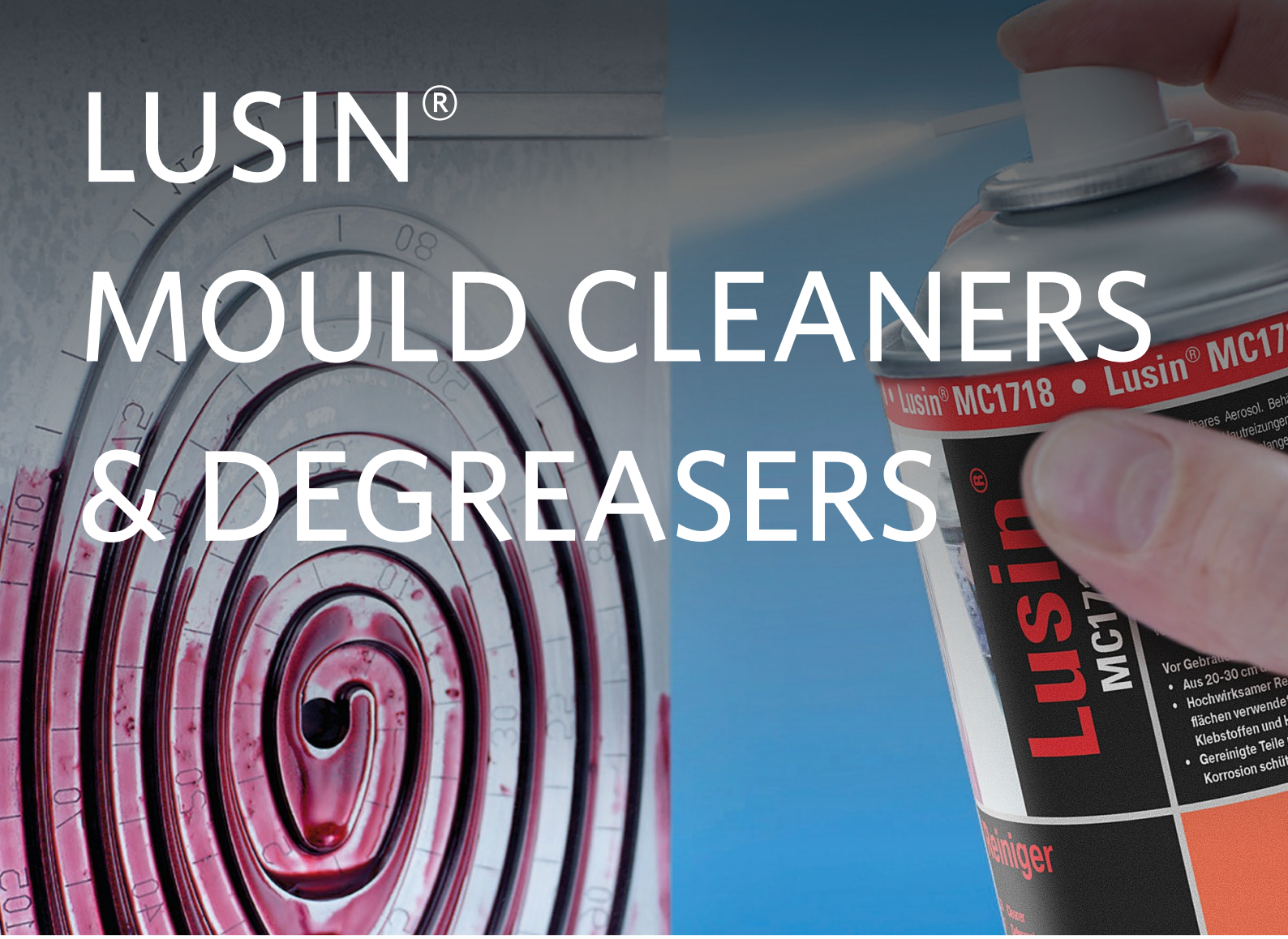
A Complete Solution for Greater Efficiency

For even greater efficiency and cost effectiveness, many of Chem-Trend's maintenance solutions and release agents offer multiple benefits in one product. And when used as a complete system, Lusin® mould maintenance products are designed to enhance the power of each product. As part of a regular maintenance routine, the combination of Lusin® cleaners, lubricants and mould protectants delivers maximum benefits.

LUSIN®
MOULD CLEANERS & DEGREASERS



Cleaning and Degreasing Keep Your High-value Tooling Operating Efficiently and Working Longer.

Mould cleaners work by dissolving all polymers with the exception of PE and PP, while surface cleaners and degreasers work by removing the buildup of materials such as oils, waxes and pastes. Our mould cleaners provide additional benefits. They are excellent at removing polymer residue from venting without the need to remove the mould.

MOULD CLEANERS & DEGREASERS

Cleaning Agents and Degreasers Powerfully Attack Buildup

Over time, contaminants can accumulate on mould surfaces, causing defective parts and damage to the mould. Lusin® cleaning agents and degreasers safely and effectively remove resins, colours, additives, waxes, oils, grease and most types of polymer residues for better surface quality and improved start-up procedures. Available in aerosol cans for precise spray applications.

● highly recommended

	Non-flammable aerosol	NSF registered	Cleaning agent	Degreaser
Lusin® MC1718			●	
Lusin® Clean L 23 F		●	●	
Lusin® Clean L 101 F	●	●	●	
Lusin® Clean L 11				●
Lusin® Clean L 52 F		●		●
Lusin® Clean L 51				●

LUSIN® MC1718

Cleaning Agent Based on Organic Solvents

Benefits

- Removes polymer residues
- Has a rapid cleaning effect

Description

Lusin® MC1718 is an organic cleaning agent that is especially suitable for removing tenacious resin and other residues from metal surfaces.

Typical Properties

Boiling Point (aerosol):	< -10 °C (14 °F)
Density (active ingredient):	< 1,0 g/cm^3

Application

Lusin® MC1718 is used for the cleaning of dirty moulds and for dissolving polymer residues (e.g., PVC, POM, polyamides, acrylates, etc.).

Spray Lusin® MC1718 on contaminated moulds, allow the product to react and then remove it by producing parts (they will initially show affected surfaces). The product can also be removed by using a cloth wipe.

If required, the procedure can be repeated several times at increased temperatures and longer reaction time (1 hour maximum).

In case of production stoppage, after having cleaned the surface with Lusin® MC1718, a mould protectant (anticorrosion agent) like Lusin® Protect G 31 F (if NSF compliance is required) should be applied; in all other cases Lusin® Protect G 31 or Lusin® Protect G 11 can be used.

Caution: Lusin® MC1718 attacks plastic and paint surfaces.

Packaging

Aerosol: 400 ml with 12 cans per box
Bulk: 20 l

LUSIN® CLEAN L 23 F

Cleaning Agent Based on Organic Solvents

Benefits

- Removes polymer residues
- Has a rapid cleaning effect
- NSF registered, conforms to A1 and K3 listing requirements

Description

Lusin® Clean L 23 F is an organic cleaning agent that is especially suitable for removing tenacious resin and other residues from metal surfaces. The product evaporates quickly, so after spraying, it should be wiped off quickly.

Typical Properties

Boiling Point (aerosol):	< -10 °C (14 °F)
Density (active ingredient):	< 0,85 g/cm^3

Application

Lusin® Clean L 23 F is used for the cleaning of dirty moulds, and for dissolving polymer residues, e.g., PVC, POM, polyamides, acrylates, etc.

Spray Lusin® Clean L 23 F on contaminated moulds, allow the product to react, then remove it by producing parts (they will initially show affected surfaces). The product can also be removed by using a cloth wipe.

If required, the procedure can be repeated several times at increased temperatures and longer reaction time (1 hour maximum). In case of production stoppage, after having cleaned the surface with Lusin® Clean L 23 F, a mould protectant (anticorrosion agent) like Lusin® Protect G 31 F (if NSF compliance is required) should be applied; in all other cases Lusin® Protect G 31 or Lusin® Protect G 11 can be used.

Caution: Lusin® Clean L 23 F attacks plastic and paint surfaces.

Packaging

Aerosol: 400 ml with 12 cans per box

LUSIN® CLEAN L 101 F

Mould Cleaner

Benefits

- Removes polymer residues
- Has an excellent cleaning effect
- Suitable for high temperature applications
- Non-flammable
- NSF registered, conforming to K1 and K3 category codes

Description

Lusin® Clean L 101 F is an organic, solvent-free mould cleaner that is especially suitable for removing tenacious resin and other residues from metal surfaces.

Typical Properties

Appearance of the active ingredient:	Liquid, clear
Refraction index:	1,04 – 1,08
Flash point:	>100 °C (212 °F)

Application

Lusin® Clean L 101 F is used for the cleaning of contaminated moulds in machines processing thermoplastic resins. The cleaning effect is mainly based on dissolving and etching of polymer and additive residues. Spray Lusin® Clean L 101 F on contaminated moulds. In case of strong contamination allow the product to react for several minutes. Afterwards the contamination can be removed by producing parts (they will initially show affected surfaces). The product can also be removed by using a cloth wipe. In case of production stoppage, after having cleaned the surface with Lusin® Clean L 101 F, a mould protectant (anticorrosion agent) like Lusin® Protect G 31 F (if NSF compliance is required) should be applied; in all other cases Lusin® Protect G 31 or Lusin® Protect G 11 can be used. Due to its high flash point >100°C (212 °F), Lusin® Clean L 101 F can be applied on hot moulds (max. 130°C, 266 °F) or metal surfaces.

Caution: Lusin® Clean L 101 F attacks plastic and paint surfaces.

Due to the use of non-flammable propellants, spray rate and spray pattern of the aerosol may change slightly during application.

Lusin® Clean L 101 F does not affect sealings made of ethylene/propylene (EP), polychloroprene (CR), perfluorelastomers, polysiloxane (SI), fluorinated hydrocarbon (FKM except Viton) or PTFE.

Lusin® Clean L 101 F should not come into contact with sealings made of butadiene acrylonitrile (NBR) or polyurethane (PU).

Packaging

Aerosol: 400 ml with 12 cans per box

LUSIN® CLEAN L 11

Cleaning Agent Based on Organic Solvents

Benefits

- Degreases and cleans thoroughly
- Short drying times
- Suitable for plastics and rubbers

Description

Lusin® Clean L 11 dissolves oils and greases and removes wax residues. Conventional plastics and rubbers are resistant to short-term exposure to the cleaner, which dries rapidly.

Typical Properties

Appearance of the active ingredient:	Liquid, colourless

Application

Lusin® Clean L 11 thoroughly wets the parts and is suitable for the removal of oil, grease and wax residues on plastic, metal, and rubber surfaces. It is applicable for cleaning and maintenance of all plastic surfaces in cars, technical apparatus, etc.

The parts can be cleaned by wiping, dipping or spraying.
It is recommended to treat freshly cleaned metal surfaces with a mould protectant (anticorrosion agent) like Lusin® Protect G 31 F (NSF compliance), Lusin® Protect G 11 or Lusin® Protect G 31 to prevent corrosion.

Packaging

Aerosol: 400 ml with 12 cans per box
Bulk: 20 l, 200 l

LUSIN® CLEAN L 52 F

Degreaser

Benefits

- Rapid and thorough cleaning
- Removes oil, grease and wax deposits
- NSF registered, conform to K1 and K3 categories

Description

Lusin® Clean L 52 F is an easy and rapidly spreading degreasing agent based on organic solvents. The product removes oils, greases and waxes from metal and most plastic surfaces.

Typical Properties

Appearance of the active ingredient:	Liquid, colourless

Application

Lusin® Clean L 52 F is suitable for the removal of oil, grease and wax deposits on plastic and metal surfaces. The product is especially suitable to degrease tools and moulds in plastic processing machines.

Spray Lusin® Clean L 52 F on contaminated parts, let the product react for some minutes and then wipe the parts with a clean cloth.

Packaging

Aerosol: 400 ml with 12 cans per box

LUSIN® CLEAN L 51

Degreaser

Benefits

- Rapid and thorough cleaning
- Removes oil, grease and wax deposits

Description

Lusin® Clean L 51 is an organic cleaning agent with a pleasant orange-like smell based on limonene and surfactants. The product removes oils, greases and waxes from metal and most plastic surfaces. Furthermore it spreads easily and rapidly.

Typical Properties

Appearance of the active ingredient:	Liquid, colourless

Application

Lusin® Clean L 51 is suitable for the removal of oil, grease and wax deposits on plastic and metal surfaces. The product is especially suitable to degrease tools and moulds in plastic processing machines.

Spray Lusin® Clean L 51 on contaminated parts, let the product react for some minutes, and then wipe the parts with a clean cloth.
We recommend to treat the freshly cleaned metal surfaces with Lusin® Protect G 11 or Lusin® Protect G 31 to prevent corrosion.

Packaging

Aerosol: 400 ml with 12 cans per box

LUSIN® MOULD PROTECTANTS

Mould Protectants Keep Moulds and Tools in their Best Operating Condition.

Mould protectants are used wherever metallic surfaces have to be protected from corrosion and oxidation, which has a negative influence on the part being produced and destroys the surface of moulds and tooling. They are used to keep moulds and tools in their best operating condition, even while being kept in storage.

MOULD PROTECTANTS

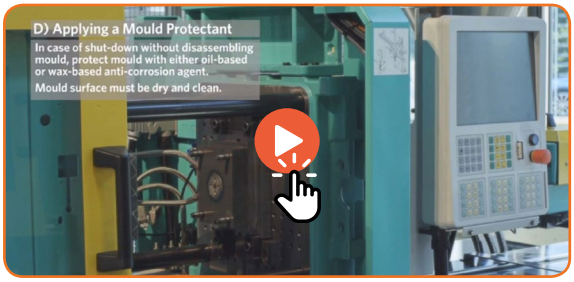
Mould Protectants for Extended Equipment Life

Easy-to-apply Lusin® mould protectants provide a barrier on metal surfaces from water, oxygen and other corrosive agents, keeping your equipment clean and running efficiently. Tinted formulas show where the mould protectant has been applied. Mould protectants also act as a release agent for early shots and are removed during the production process, optimising productivity. Maximum benefits are gained when Lusin® mould protectants are used together with Lusin® cleaners and degreasers as part of a regular maintenance cycle.

● highly recommended ◉ recommended ○ suitable

	NSF registered	Rust remover	Anticorrosion	Long-term durability
Lusin® Protect G 11/G 12*			●	◉
Lusin® Protect O 45 F	●	○	●	◉
Lusin® Protect G 31/G 32*			●	●
Lusin® Protect G 31 F	●		●	●
Lusin® Protect O 41		●	◉	○

* tinted red for enhanced application visibility



LUSIN® PROTECT G 11

Grease-like Mould Protectant (Anticorrosion)

Benefits

- Stable, transparent film
- Resistant to low and high temperatures
- Repels moisture
- Ensures temporary protection against corrosion

Description

Lusin® Protect G 11 is a grease-like mould protectant (anticorrosion agent) based on refined hydrocarbon oils and special additives for temporary protection of all kinds of metal surfaces. The elastic, poly-molecular film penetrates into tiny cracks and corners.
Lusin® Protect G 11 is free from silicone, resistant to low temperatures and does not drip. In addition to aerosol and ready-to-use versions the product is also available as concentrate for special applications.

Typical Properties

Service temperature range:	Up to 80 °C (176 °F)
Anticorrosion behaviour, DIN 50017:	No corrosion after 10 h
Salt spray test, 5% NaCl solution, at 35 °C (95 °F), DIN 50021:	No corrosion after 5 h

Application

Lusin® Protect G 11 is mainly used to protect moulds and dies dedicated for processing thermoplastic resins against corrosion.

Lusin® Protect G 11 only shows maximum protecting (anticorrosion) properties when applied on dry and clean metal surfaces. For cleaning it is recommended to use Lusin® MC1718 or Lusin® Clean L 23 F as a mould cleaning agent and Lusin® Clean L 11 or Lusin® Clean L 52 F as a degreasing agent.

Optimal film generation is only ensured if Lusin® Protect G 11 is applied in several thin layers taking particular care to cover edges and under-cuts.

Lusin® Protect G 11 can either be removed by the use of degreasers like Lusin® Clean L 11 or Lusin® Clean L 52 F or by producing parts, thus transferring the mould protectant to the produced parts.

In terms of subsequent treatment of the produced parts, such as lacquering, printing or gluing, preliminary tests are recommended.

Packaging

Aerosol: 400 ml with 12 cans per box

LUSIN® PROTECT G 12

Grease-like Mould Protectant (Anticorrosion)

Benefits

- Stable, red film
- Resistant to low and high temperatures
- Repels moisture
- Ensures temporary protection against corrosion

Description

Lusin® Protect G 12 is a grease-like mould protectant (anticorrosion agent) based on refined hydrocarbon oils and special additives for temporary protection of all kinds of metal surfaces. The elastic, poly-molecular film penetrates into tiny cracks and corners. Lusin® Protect G12 is free from silicone, resistant to low temperatures, and does not drip. In addition to aerosol and ready-to-use versions the product is also available as concentrate for special applications.

Typical Properties

Service temperature range:	Up to 80 °C (176 °F)
Anticorrosion behaviour, DIN 50017:	No corrosion after 10 h
Salt spray test, 5% NaCl solution, at 35 °C (95 °F), DIN 50021:	No corrosion after 5 h

Application

Lusin® Protect G 12 is mainly used to protect moulds and dies dedicated for processing thermoplastic resins against corrosion.

Lusin® Protect G 12 only shows maximum protecting (anticorrosion) properties when applied on dry and clean metal surfaces. For cleaning it is recommended to use Lusin® MC1718 or Lusin® Clean L 23 F as a mould cleaning agent and Lusin® Clean L 11 or Lusin® Clean L 52 F as a degreasing agent.

Optimal film generation is only ensured if Lusin® Protect G 12 is applied in several thin layers, taking particular care to cover edges and undercuts.

Lusin® Protect G 12 can either be removed by the use of degreasers like Lusin® Clean L 11 or Lusin® Clean L 52 F or by producing parts, thus transferring the mould protectant to the produced parts.

In terms of subsequent treatment of the produced parts, such as lacquering, printing or gluing, preliminary tests are recommended.

Packaging

Aerosol: 400 ml with 12 cans per box

LUSIN® PROTECT O 45 F

Grease-based Anticorrosion Mould Protectant and Lubricant

Benefits

- NSF registered, conforms to H1 listing requirements
- Stable, transparent protective film
- Repels water

Description

Lusin® Protect O 45 F is an efficient mould protectant (anticorrosion agent) that also shows lubricating properties. The grease base of Lusin® Protect O 45 F enables the product to penetrate into very fine cracks. Lusin® Protect O 45 F conforms to H1 category code and therefore complies with FDA 21 CFR §178.3570.

Typical Properties

Appearance:	Transparent liquid
Temperature range:	Up to 80°C (176 °C)
Corrosion protection per DIN 50017 on steel type RST-37-2:	No corrosion after 40 hours
Salt water spray test per DIN 50021 on steel type 101-A	No corrosion after 50 hours

Application

Lusin® Protect O 45 F is mainly used to protect moulds and dies dedicated for processing thermoplastic resins against corrosion.

Lusin® Protect O 45 F only shows maximum protecting (anticorrosion) properties when applied on dry and clean metal surfaces.
For cleaning it is recommended to use Lusin® Clean L 23 F as a mould cleaning agent and Lusin® Clean L 52 F as a degreasing agent. Both products are NSF registered conforming to K1 and K3 listing requirements.

Optimal film generation is only ensured if Lusin® Protect O 45 F is applied in several thin layers, taking particular care to cover edges and undercuts.

Lusin® Protect O 45 F can either be removed by the use of the degreaser Lusin® Clean L 52 F or by producing parts, thus transfering the mould protectant to the produced parts.

In terms of subsequent treatment of the produced parts, such as lacquering, printing or gluing, preliminary tests are recommended.

Packaging

Aerosol: 400 ml with 12 cans per box

LUSIN® PROTECT G 31

Wax-based Mould Protectant (Anticorrosion) and Lubricant

Benefits

- Stable transparent film; resistant to handling
- Lasting protection against corrosion
- Suitable for use as a release agent

Description

Lusin® Protect G 31 is a highly efficient mould protectant (anticorrosion agent) that also shows lubricating properties. The delayed generation of the solid protective film enables Lusin® Protect G 31 to penetrate into very fine cracks. The protective film is resistant to handling and starts melting at around 50 °C (122 °F).

Lusin® Protect G 31 aerosol contains UV light sensitive pigments enabling the protective film to be visible under UV light (maximum at 366 nm).

Typical Properties

Corrosion protection per DIN 50017:	No corrosion after 20 h
Neutral Salt Spray Test according to DIN EN ISO 9227:	No corrosion after 28 h

Application

Lusin® Protect G 31 is mainly used to protect moulds and dies dedicated for processing thermoplastic resins against corrosion.

Lusin® Protect G 31 only shows maximum protecting (anticorrosion) properties when applied on dry and clean metal surfaces. For cleaning it is recommended to use Lusin® MC1718 or Lusin® Clean L 23 F as a mould cleaning agent and Lusin® Clean L 11 or Lusin® Clean L 52 F as a degreasing agent.

Optimal film generation is only ensured if Lusin® Protect G 31 is applied in several thin layers, taking particular care to cover edges and undercuts.

Lusin® Protect G 31 can either be removed by the use of degreasers like Lusin® Clean L 11 or Lusin® Clean L 52 F or by producing parts, thus transferring the mould protectant to the produced parts.

In terms of subsequent treatment of the produced parts, such as lacquering, printing or gluing, preliminary tests are recommended.

Packaging

Aerosol: 400 ml with 12 cans per box
Bulk: 20 l

LUSIN® PROTECT G 32

Wax-based Mould Protectant (Anticorrosion) and Lubricating Agent

Benefits

- Stable red film; resistant to handling
- Lasting protection against corrosion
- Suitable for use as release agent

Description

Lusin® Protect G 32 is a highly efficient mould protectant (anticorrosion agent) that also shows lubricating properties. The delayed generation of the solid protective film enables Lusin® Protect G 32 to penetrate into very fine cracks. The protective film is resistant to handling and starts melting at around 50 °C (122 °F).

Typical Properties

Corrosion protection per DIN 50017:	No corrosion after 20 h
Salt spray test per DIN 50021 with 5% NaCl-solution:	No corrosion after 28 h

Application

Lusin® Protect G 32 is mainly used to protect moulds and dies dedicated for processing thermoplastic resins against corrosion.

Lusin® Protect G 32 only shows maximum protecting (anticorrosion) properties when applied on dry and clean metal surfaces. For cleaning it is recommended to use Lusin® MC1718 or Lusin® Clean L 23 F as a mould cleaning agent and Lusin® Clean L 11 or Lusin® Clean L 52 F as a degreasing agent.

Optimal film generation is only ensured if Lusin® Protect G 32 is applied in several thin layers, taking particular care to cover edges and undercuts.

Lusin® Protect G 32 can either be removed by the use of degreasing agents like Lusin® Clean L 11 or Lusin® Clean L 52 F or by producing parts, thus transferring the mould protectant to the produced parts.

In terms of subsequent treatment of the produced parts, such as lacquering, printing or gluing, preliminary tests are recommended.

Packaging

Aerosol: 400 ml with 12 cans per box

LUSIN® PROTECT G 31 F

Wax-based Mould Protectant (Anticorrosion) and Lubricant

Benefits

- Food grade lubricant, NSF H1 registered
- Long-lasting protection against corrosion
- Stable whitish film resistant to handling
- Easy to remove

Description

Lusin® Protect G 31 F is a highly efficient mould protectant (anticorrosion agent) that also shows lubricating properties. The delayed generation of the solid protective film enables Lusin® Protect G 31 F to penetrate into very fine cracks. Lusin® Protect G 31 F conforms to H1 category code and therefore complies with FDA 21 CFR §178.3570.

Typical Properties

Flash point:	< -10 °C (14 °F)
Neutral Salt Spray Test according to DIN EN ISO 9227:	No corrosion after 150 h

Application

Lusin® Protect G 31 F is mainly used to protect moulds and dies dedicated for processing thermoplastic resins against corrosion.

Lusin® Protect G 31 F only shows maximum protecting (anticorrosion) properties when applied on dry and clean metal surfaces. For cleaning it is recommended to use Lusin® Clean L 23 F as a mould cleaning agent and Lusin® Clean L 52 F as a degreasing agent. Both products are NSF registered.

Optimal film generation is only ensured if Lusin® Protect G 31 F is applied in several thin layers, taking particular care to cover edges and undercuts.

Lusin® Protect G 31 F can either be removed by producing parts, thus transferring the mould protectant to the produced parts, or by the use of the degreasing agent Lusin® Clean L 52 F.

In terms of subsequent treatment of the produced parts, such as lacquering, printing or gluing, preliminary tests are recommended.

Packaging

Aerosol: 400 ml with 12 cans per box

LUSIN® PROTECT O 41

High Performance Spray Oil

Benefits

- Lubricates without greasy touch
- Removes rust
- Loosens corroded parts
- Insoluble in water

Description

Lusin® Protect O 41 is a high-performance spray oil based on a combination of mineral oils and selective additives. It can be used as a lubricant, a rust remover and as a mould protectant (anticorrosion agent). The clear protective film lubricates without feeling greasy. Due to the rust-removing functionality, it will loosen corrosion and corroded parts.

Lusin® Protect O 41 bulk is a ready-to-use mixture containing organic solvents.

Typical Properties

Appearance of active ingredient:	Liquid, oily
Application temperature range:	Up to 150 °C (302 °F)

Application

A fine, even spray film should be applied on the clean metal surface, especially to edges and undercuts. For cleaning it is recommended to use Lusin® L 23 or Lusin® MC1718 as a mould cleaning agent and Lusin® Clean L 11 or Lusin® Clean L 52 F as a degreasing agent.

Packaging

Aerosol: 400 ml with 12 cans per box

LUSIN® LUBRICANTS

Lubricant Sprays and Pastes Provide Long-Lasting Effect and Economical Use.

Lubricants are used in thermoplastic processing mainly for ejector pins, sliders, nozzles and conveyor belts to avoid seizing or blocking of these moving parts. For critical parts such as ejector pins, thermally stable, special purpose lubricants have been developed that will remain on the ejector pins and will not be transferred during processing.

LUSIN® LUBRICANTS

Lubricants for Performance under Extreme Pressure

Lusin® lubricants are developed specially for ejector pins and core slides in plastic injection moulding applications. Heavy-duty lubricating film keeps mechanical parts moving and prevents the breakage and seizing of ejector pins, while avoiding transfer of the lubricant to the final part. Lusin® lubricants protect equipment from dangerous corrosion.

● highly recommended ○ recommended

	NSF registered	10/2011 compliance	Anticorrosion	Long-term durability	Lubricant for ejector pins	High-temperature lubricant (>300 °C/572 °F)
Lusin® Lub PZO 152			○	●	●	
Lusin® Lub PM 1001				●		●
Lusin® Lub O 32 F	●	●		●		
Lusin® LU1201F	●		○	●	●	

LUSIN® LUB PZO 152

Special Lubricating and Assembly Paste

Benefits

- Resistant to high pressure
- Prevents stick slip
- Protects against corrosion
- Prevents fretting corrosion
- Resistant to hot water and steam
- Resistant to alkaline and acid media
- Spreads easily

Description

Lusin® Lub PZO 152 is a soft, multi-purpose paste based on mineral oil and a combination of inorganic solid lubricants. This special lubricating and assembly paste is resistant to high pressure and protects against corrosion including fretting corrosion.

Lusin® Lub PZO 152 achieves a maximum lubricating effect in the preferred application range up to 150°C (302 °F).

Lusin® Lub PZO 152 prevents stick slip and is resistant to hot water, steam, alkaline and acid media. In addition, it spreads easily and delivers a long-lasting performance.

Typical Properties

Appearance of the active ingredient:	Paste, beige
Density, DIN 51757, at 20 °C (68 °F), g/mL, approx.:	1.35
Drop point, °C (°F):	> 150 (302)
Service temperature range, °C (°F):	–30 to 150 (–22 to 302) peaks up to 200 (392)
Worked penetration based on DIN 51804 (0,1 mm):	Approx. 315

Application

Lusin® Lub PZO 152 is recommended for use on core slides and ejector pins in plastic processing machines. The lubricant is designed for maintenance and repair purposes, especially for sliding surfaces (low-to-medium sliding speeds), for applications where there might be stick slip, and for applications under high static and dynamic loads. The product can be used for applications exposed to heat and as assembly aid for all kinds of applications. Lusin® Lub PZO 152 is a multi-purpose product for assembly operations in the entire machine building industry.

Application notes: Clean and degrease all surfaces, apply a thin and even layer of paste or spray. For cleaning it is recommended to use Lusin® Clean L 23 F or Lusin® MC1718 as a mould cleaning agent and Lusin® Clean L 11 or Lusin® Clean L 52 F as a degreasing agent.

Packaging

Paste: 140 g tube
Can: 1500 g
Aerosol: 400 ml with 12 cans per box

LUSIN® LUB PM 1001

High-Temperature Paste with Synthetic Base Oil

Benefits

- Resistant to high pressure
- Resistant to high temperatures
- Thermally conductive
- Prevents seizure

Description

Lusin® Lub PM 1001 is a high-temperature lubricating and assembly paste with a synthetic base oil and a combination of inorganic solid lubricants especially resistant to high temperatures. This paste ensures lubrication and is resistant to temperatures up to 1000 °C (1832 °F). Lusin® Lub PM 1001 is thermally conductive and prevents seizure.

Typical Properties

Colour:	Light grey
Density, DIN 51 757, at 20 °C (68 °F), g/mL, approx.:	1.3

Application

Lusin® Lub PM 1001 is used as a lubricant for screw connections subject to high temperatures and pressures, e.g., screws of injection moulding machines or dies in extrusion. It can also be used as seizure-preventing, heat-conductive assembly paste for all kind of applications.

Application notes: Clean and degrease the surface. Apply a thin layer of paste on the entire surface and rub it in slightly. Apply a thin and even layer by spraying.

For cleaning it is recommended to use Lusin® Clean L 23 F or Lusin® MC1718 as a mould cleaning agent and Lusin® Clean L 11 or Lusin® Clean L 52 F as a degreasing agent.

Packaging

Can: 1500 g
Spray: 400 ml with 12 cans per box

LUSIN® LUB O 32 F

Lubricant and Release Agent with 100% Active Ingredient

Benefits

- Solvent and silicone-free
- Environmentally responsible
- 100% active ingredient
- The formulation meets the requirements of 21 CFR §178.3570 "lubricants with incidental food contact"
- According to 21 CFR §175.300, the product can be used as resinous and polymeric coating
- The formulation is in compliance with European Plastics Regulation No 10/2011

Typical Properties

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

Appearance:	Yellow liquid
Density (room temperature):	0,98 – 1,02 g/mL
Viscosity (room temperature):	120 – 170 mPas
Recommended Cleaning Agent:	Lusin® Clean M 140*
Recommended amount of Lusin® Clean M 140*:	Tenfold of the dead volume of the tubes

Description

In general, Lusin® Lub O 32 F can be used as lubricant or release agent in the packaging industry. If the product is applied on a die, e.g., in blown film applications, it reduces the buildup during production. Lusin® Lub O 32 F, applied to the outside surface of PET preforms, significantly reduces scratches to the plastic surfaces occurring during transport and handling. The blocking of bottles during the transport using air conveyors can be reduced to an absolute minimum by means of coating the preforms or the final bottles with Lusin® Lub O 32 F.

Application

In terms of lubrication of the outside surface of PET preforms, Lusin® Lub O 32 F should be applied using suitable spray equipment, e.g., Steidle equipment. The product is also suitable as a release agent in the thermoplastic processing industry. Mould temperatures should not exceed 200 °C (392 °F) in terms of injection moulding. For film applications the die temperature should not exceed 190 °C (374 °F). Lusin® Lub O 32 F is a waterless system; therefore, it is strongly advised to avoid dilution with water since even small impurities of water in the machinery and especially in the tubes will cause agglomerates that may block the system.

Packaging

Aerosol: 400 ml 12 cans per box
Bulk: 1 l, 20 l, 200 l

* For more information, please contact your Chem-Trend representative or the distribution partner.

LUSIN® LU1201F

Lubricant

Benefits

- Highly effective
- For use at mould temperatures up to 120°C (248°F)
- NSF registered according to H1 category code
- Long-term stability
- Protects against corrosion

Description

Lusin® LU1201F is a soft white special lubricant based on synthetic base oils.
This multi-purpose lubricant protects against corrosion, prevents stick slip and is resistant to hot water, steam, alkaline and acid media. In addition, it spreads easily and shows reliable adhesion to the friction point.
Lusin® LU1201F may also be used at lubricating points where occasional contact with food products cannot be excluded.

Lusin® LU1201F achieves a maximum lubricating effect in the preferred application range from -45 °C (-49 °F) up to 120 °C (248 °F).

Typical Properties

Appearance of lubricant / active ingredients contained in the aerosol	Yellow liquid
Density:	1,13 g/mL

Application

Lusin® LU1201F is recommended for the use on core slides and ejector pins in plastic processing machines. The lubricant is designed for maintenance and repair purposes, especially for sliding surfaces (low to medium sliding speeds), for applications where there might be stick slip and for applications under high static and dynamic loads. The product can also be used for applications exposed to heat.

In addition, it can be used as assembly aid for all kind of applications. Lusin® LU1201F is a multi-purpose product for assembly operations in the entire machine building industry.

For maximum performance, cleaning of the lubricating point is necessary. It is recommended to use Lusin® L 23 F as a mould cleaning agent and Lusin® Clean L 52 F as a degreasing agent. Both products are NSF registered.

Packaging

Aerosol: 400 ml with 12 cans per box

LUSIN®
RELEASE AGENTS

Lusin® release agents offer superior demoulding properties and improve productivity, quality and tool life.

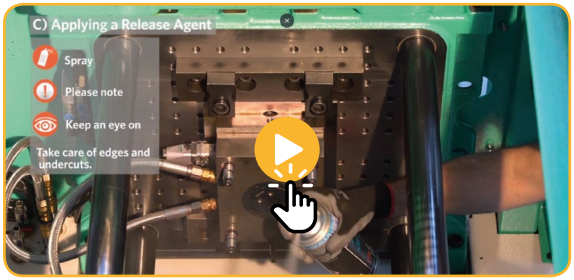
Lusin® Alro release agents ensure trouble-free moulding, save time, shorten cycle times, are gentle on dies and moulds, reduce scrap and are available as silicone-free and silicone-based formulations. Silicone-free products are recommended for mouldings that require post-moulding treatments such as painting, glueing, or imprinting. Silicone-based release agents offer advantages in their long cycle times and excellent release properties. Our Lusin® release agents are among other polymers suitable for ABS, PC, PEEK and PA, eliminate stress cracking and minimise mould flow lines.

LUSIN® ALRO

Lusin® Release Agents: A Reputation for Success.

Our superior products are rooted in our manufacturing and technical expertise, understanding of thermoplastic processing operations, deep industry insight and specialized laboratory resources.

	Product	NSF registered	10/2011 compliant	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	Temperature range 150°C/302°F	Temperature range 200-300°C/392-572°F
Silicone-free	Lusin® Alro OL 151			●	●		●	●	●	●	●		●		●	●	●	
	Lusin® Alro OL 141			○	○	●			○	○		●					●	
	Lusin® Alro OL 202 F	●	●	●	●		●		●	●	●		●	●	●	●	●	●
	Lusin® Alro LL 261 [1]			●	●	●	●		●	●	●		●	●	○	●	●	●
Silicone-based	Lusin® Alro OL 153 S			●	●		●	●	●	●	●		●		●	●	●	
	Lusin® Alro OL 201 S			●	●		●	●		●	●		●		●	●		●



● highly recommended ○ suitable

[1] PTFE based

NOTES: Not all products are available in all regions of the world.
Due to occasional changes in offerings, product specifications may vary.
Please consult with your local representative to assure the most up-to-date information.

LUSIN® ALRO OL 151

Silicone-free Universal Release Agent
for Processing Thermoplastics Resins

Benefits
- For use at mould temperatures up to 150 °C (302 °F)
- Long cycle time
- Water soluble
- Wide range of applications

Please note: **NOT recommended** for stress cracking sensitive polymers like PC and ABS

Description
Lusin® Alro OL 151 is a silicone-free release agent on the basis of synthetic oils and additives.
It is suitable for an application temperature (mould temperature) up to 150°C (302 °F).
Besides excellent release properties, Lusin® Alro OL 151 also shows excellent slip effects combined with high pressure resistance.

Typical Properties
Appearance of the active ingredient: Liquid, green
Density (g/mL at 20°C (68 °F)): 0,8

Application
A fine even film should be applied to the clean mould, especially to edges and undercuts.
For cleaning, it is recommended to use Lusin® L 23 F or Lusin® MC1718 as a mould cleaning agent and Lusin® Clean L 11 or Lusin® Clean L 51 as a degreasing agent.
Should subsequent treatment of the parts be required, e.g., metal coating, lacquering, etc., we recommend preliminary tests.
Residues of the release agent are easily removed by rinsing the parts with a mixture of water and degreaser (e.g. Lusin® Clean L 11).

Packaging
Aerosol: 400 ml with 12 cans per box
Bulk: 20 l

LUSIN® ALRO OL 141

Special Silicone-free Release Agent
for Processing Polycarbonates and Other Stress Crack Sensitive Polymers

Benefits
- Mainly recommended for stress cracking sensitive polymers like PC and PMMA
- For use at mould temperatures up to 140 °C (284 °F)
- Produced parts can be lacquered or otherwise coated

Description
Lusin® Alro OL 141 is a silicone-free release agent on the basis of synthetic oils and additives.
It is suitable for an application temperature (mould temperature) up to 140°C (284 °F).
Lusin® Alro OL 141 is mainly recommended as release agent for stress cracking sensitive polymers like PC or PMMA and for ABS.

Typical Properties
Appearance of the active ingredient: Liquid, colourless

Application
The product should be applied to a clean mould and for cleaning it is recommended to use Lusin® L 23 F or Lusin® MC1718 as a mould cleaning agent and Lusin® Clean L 11 or Lusin® Clean L 51 as a degreasing agent.

A fine even film should be applied to the clean mould, especially to edges and undercuts.

Should subsequent treatment of the parts be required, e.g., metal coating, lacquering, etc., we recommend preliminary tests.

Residues of the release agent are easily removed by rinsing the parts with a mixture of water and degreaser (e.g. Lusin® Clean L 11).

Packaging
Aerosol: 400 ml with 12 cans per box

LUSIN® ALRO OL 202 F

Silicone-free Release Agent
for Processing Thermoplastic Resins

Benefits
- For use at mould temperatures up to 200°C (392 °F)
- Also applicable as a lubricant
- Silicone-free
- Water soluble
- NSF registered, conforms to H1 listing requirements
- The formulation is in compliance with European Plastics Regulation No 10/2011

Description
Lusin® Alro OL 202 F is a silicone-free release agent for the processing of thermoplastic resins. It is also suitable as a lubricating agent with improved anti-friction properties. Due to the conformity to H1 listing requirements and the compliance with European Plastics Regulation No 10/2011, Lusin® Alro OL 202 F can be used as a release and anti-friction agent for parts that might come into contact with food.

Typical Properties
Appearance of the active ingredient: Liquid, yellowish

Application
A fine even film should be applied to the clean mould, especially to edges and undercuts. For cleaning, it is recommended to use Lusin® Clean L 23 F as a mould cleaning agent and Lusin® Clean L 52 F as a degreasing agent. Both products are NSF registered.

Should subsequent treatment of the parts be required, e.g., metal coating, lacquering, etc., we recommend preliminary tests.

Residues of the release agent are easily removed by rinsing the parts with a mixture of water and degreaser (e.g., Lusin® Clean L 11).

Packaging
Aerosol: 400ml with 12 cans per box

LUSIN® ALRO LL 261

Silicone-free Release Agent
for Processing Thermoplastic Resins, Thermosets & Elastomers

Benefits
- For use at mould temperatures up to 260 °C (500 °F)
- Suitable as a sliding agent
- Wide range of applications

Description
Lusin® Alro LL 261 is a silicone-free release agent based on PTFE. It is suitable for an application temperature (mould temperature) up to 260 °C (500 °F).

The white air-drying film adheres to metal, plastic and glass surfaces and shows excellent release and sliding effects.

The high efficiency of Lusin® Alro LL 261 ensures several release cycles without further application.

Typical Properties
Appearance of the active ingredient:
- Liquid, white
- Dry film after evaporation of solvent / propellant

Application
The product should be applied to a clean mould and for cleaning, it is recommended to use Lusin® Clean L 23 F or Lusin® MC1718 as a mould cleaning agent or Lusin® Clean L 11 or Lusin® Clean L 51 as a degreasing agent.

Shake well the aerosol before use. A fine even film should be applied to the clean mould, especially to edges and undercuts.

After the evaporation of the solvent / propellant a dry white film is generated that shows excellent release and sliding properties.

Further treatment of the produced parts like painting, printing and gluing is possible but compatibility tests are required.

Note: Do not bring Lusin® Alro LL 261 into contact with tobacco products

Packaging
Aerosol: 400 ml with 12 cans per box

LUSIN® ALRO OL 153 S

Universal Silicone-based Release Agent
for Processing Thermoplastic Resins & Elastomers

Benefits
- Suitable for mould temperatures up to 150 °C (302 °F)
- Easy and multiple de-moulding
- Wide range of application
- Can also be used as a lubricant

Description
Lusin® Alro OL 153 S is a universal release agent for the de-moulding of thermoplastic, thermoset and elastomeric parts up to a mould temperature of 150 °C (302 °F).
It is also suitable as a lubricating agent with improved anti-friction properties.
Lusin® Alro OL 153 S is based on non-reactive silicone oils which are absolutely colourless and have no smell.

Typical Properties
Appearance of the active ingredient: Liquid, colourless

Application
A fine even spray film should be applied to the clean mould, especially to edges and undercuts. For cleaning, it is recommended to use Lusin® L 23 F or Lusin® MC1718 as a mould cleaning agent and Lusin® Clean L 11 or Lusin® Clean L 51 as a degreasing agent.

Note: In terms of post treatment of the produced parts we do not recommend the use of Lusin® Alro OL 153 S. The high de-moulding and wetting properties (even in low concentrations) will cause surface defects of the post treatment agent.

Packaging
Aerosol: 400 ml with 12 cans per box
Bulk: 20 l, 200 l

LUSIN® ALRO OL 201 S

Multi-purpose Silicone-based Release Agent
for Processing Thermoplastic Resins & Elastomers

Benefits
- For use at mould temperatures up to 200 °C (392 °F)
- Multi-purpose release agent
- Long service life

Description
Lusin® Alro OL 201 S is a multi-purpose silicone release agent. Its active ingredient consists of special silicone mixtures. Lusin® Alro OL 201 S is suitable for application temperatures up to 200 °C (392 °F). The product is a multiple de-mould release agent for processing thermoplastic materials, especially thermoplastic polyurethanes. Additionally it is suitable for processing rigid structural PU foams, hot and cold curing epoxy and polyester resins, elastomers, such as ethylene-propylene terpolymers (EPDM), nitrile rubber (NBR), fluorinated elastomers (FKM) and sulphochlorinated elastomers (CSM).

Typical Properties
Colour / appearance: Liquid, colourless
Refraction index (20°C, 68 °F): 1.4001 – 1.4061

Application
A fine even film should be applied to the clean mould, especially to edges and undercuts. For cleaning, it is recommended to use Lusin® L 23 F or Lusin® MC1718 as a mould cleaning agent and Lusin® Clean L 11 or Lusin® Clean L 51 as a degreasing agent.

Should subsequent treatment of the parts be required, e.g., metal coating, lacquering, etc. we recommend preliminary tests.

Packaging
Aerosol: 400ml with 12 cans per box
Bulk: 20 l, 200 l