THERMOPLASTICS FREQUENTLY ASKED QUESTIONS

Release Agents

GENERAL QUESTIONS ABOUT RELEASE AGENTS

What are the advantages and disadvantages of silicone-free release agents compared to those containing silicone?

Silicone-based release agents:

- Offer very good release properties and are usually advantageous for the manufacture of products with long cycle times.
- However, in most cases, additional post-mold operations will be necessary prior to painting or gluing.

Silicone-free release agents:

- Usually, no additional post-mold operations will be necessary prior to painting or gluing.

Why does the automotive industry almost exclusively use silicone-free release agents?

Parts produced for the automotive industry are generally subject to additional post-molding operations such as gluing, painting, or imprinting. The use of silicone-free release agents usually avoids any unnecessary non-value-adding workflow procedures.

What happens if a release agent is over-applied?

Over-application can cause an oily or slick surface on the molded part thereby impeding subsequent process treatment of the parts. Therefore, over-application should be avoided.

Are there suitable release agents for thermoplastic materials that are sensitive to stress cracking?

Materials such as PC, PS, and PMMA are particularly sensitive to stress cracking. Release agents have been developed that can be used in the production of parts made from these materials.

What is the advantage of using release agents from aerosol cans instead of non-aerosol products?

The use of an aerosol can allows for a consistent, even, thin application with a predictable spray pattern preventing over-application. Spray offers easy handling.

How should non-aerosol release agent products be applied?

Non-aerosol products are best applied using a high-quality spray gun or with clock-controlled spraying equipment.

What does the maximum application temperature of a release agent refer to?

The maximum application temperature refers to the mold surface temperature until which the release agent is effective. If applied to mold surface temperatures beyond the maximum application temperature, the release agent will start to decompose and negatively impact the release properties it was designed for. The maximum mold service temperature is described in the PDS of the relevant product.

QUESTIONS ABOUT LUSIN® RELEASE AGENTS

What kind of mold release agents does Chem-Trend offer?

Chem-Trend offers a wide range of different release agents for all kinds of thermoplastics materials, a variety of thermoplastic processes as well as different mold surface temperatures. Both silicone-free and silicone-based release agents are available.

Are there Chem-Trend mold release agents available for food application?

Yes. Lusin® Alro OL 202 F and Lusin® Alro O 153 S are both NSF H1 registered. Additionally, both Lusin® products are formulated in compliance with the European Plastics Regulation No. 10/2011.

Is there a Lusin® release agent available for parts made of PC and ABS, both of which are polymers sensitive to stress cracking?

Yes, Lusin® Alro OL 141 is a silicon-free release agent that was specifically designed to be used with PC, PMMA, and ABS at application temperatures up to 140°C (284°F).

What Lusin® release agent is recommended for use at high mold surface temperatures?

Lusin® Alro OL 202 F and Lusin® Alro LL 261 are designed for mold surface temperatures up to 200°C-300°C (392°F-572°F).

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To learn more about our vast Lusin® Alro product range of release agents for thermoplastic processing, please refer to our digital mold maintenance catalogue on our website. (Search our website for "Lusin Mold Maintenance.")