

FREQUENTLY ASKED QUESTIONS

PROTECTIVE AGENTS

Q) Where are anticorrosion agents used in thermoplastic processing and what are their effects?

A) Anticorrosion agents 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 the molds and tooling. Anticorrosion agents are used to keep molds and tools in their best operating condition, even while being kept in storage.

Q) What are the advantages and disadvantages of the different types of anticorrosion agents?

A) Oil-based anticorrosion agents can enter tiny and difficult-to-access spaces, such as recesses and undercuts. They dispel moisture and form a temporary protective layer that can last for several months.

Wax-based anticorrosion agents provide a stable, long-lasting protective layer and are creep-resistant; however, they may result in an inclusion of moisture, which is why the surface should be dry before application. Wax-based films tend to protect surfaces longer than oil-based agents. Wax-based agents form a "dry" film on surfaces, are easier to remove and will not contaminate plastic parts. Chem-Trend offers both types of anticorrosion agents to meet specific needs: for example, Lusin® Protect G 11 is an oil-based protective agent and Lusin® Protect G 31 is a wax-based protective agent.

Q) How can anticorrosion agents be removed from a mold or from plastic parts?

A) Oil-based anticorrosion agents should be removed with a surface cleaner before the production process. Wax-based anticorrosion agents melt at normal mold temperatures and are removed from

the mold in the course of regular processing. A separate cleaning procedure for wax-based anticorrosion agents is not required.

Q) Why are some anticorrosion agents pigmented or stained?

A) Stained or pigmented anticorrosion agents are used to make the application process easier and less wasteful. The stained or pigmented anticorrosion agents are more visible on the mold surface during the application process and therefore allow for more exacting coverage with less waste.

Q) Do multifunctional sprays that include some type of corrosion inhibitor offer adequate corrosion protection?

A) Multifunctional sprays offer temporary protection (usually for up to three months), while pure anticorrosion agents provide more extensive protection (12 – 24 months) and should be used when an extended storage period is expected.

Q) Why do wax-based anticorrosion agents provide for a better cost/benefit option than oil-based agents?

A) Wax-based anticorrosion agents save time at the restart of production with a mold because the agent dispenses during the process and manual cleaning of the mold surface cavity is not required. In addition, a wax-based agent reduces scrap due to the fast absorption of the agent.

Q) How many cycles are necessary to remove a wax-based anticorrosion agent from the cavity surface?

A) The number of cycles required depends upon multiple variables such as the mold design, operating temperatures, process, etc. In general, just a few cycles are necessary to eliminate all Lusin® anticorrosion agents from the cavity surface.