



Antistatic Agent for Internal Antistatic Finishing of PS and ABS

Properties of the plastic:

Plastics have high volume and specific surface resistances (up to 10^{17} ohms/cm²), which lead to insulating properties. At the same time, this insulating property results in strong electrostatic charges on the surfaces, which, in addition to attracting dust, can lead to dangerous spark discharges.

Mode of action:

This antistatic agent is a hygroscopic (water-attracting) active ingredient that migrates to the surface of the plastic parts. A very thin film of water forms there - which varies depending on the humidity. This film of water allows electrostatic charges to flow away, which reduces or avoids the risk of dust attraction, spark discharge, etc. The surface resistance can be reduced to up to 10^9 ohms/cm².

Please note:

It should be noted that the antistatic agent needs time and opportunity to form an appropriate film of water on the part surface. Resistance measurements are therefore carried out at 50% relative humidity and 23°C.

If the air humidity is low, e.g. in winter, heating air, the antistatic agent needs a longer time to build up the water film to the point of impossibility (insulation).

If the water film is destroyed, for example by wiping the surface, the medium must rebuild the moisture film in order to have the desired effect.

The wafer-thin water film can potentially affect printability and weldability. Any possible effects should therefore be determined in a preliminary test.

Approval of the German Federal Health Office:

The additives used are essentially non-toxic. According to the guidelines of the German Federal Health Office "Health Assessment of Plastics within the Framework of the Food Law", a maximum 5% gets added.

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KVS GmbH

