KETTLITZ-Antitack BTO-31 LF

- technical leaflet -

Magnesium stearate dispersion of high efficiency. Due to its additives (detergents, antirust and antifoam agents) it can be used in batch-off systems (dip tank or spraying system) as well as for Barwell equipment.

Antitack BTO-31 LF does not contain any heavy metal ions and can therefore replace zinc stearate dispersions to prevent environmental pollution. This antitack agent was developed considering latest ecological aspects. An independent institute stated in an official certificate the ready degradability according OECD-Guideline OECD-301 B (CO2 Evolution Test) of about 80 % within 28 days.
That's why KETTLITZ-Antitack BTO-31 LF can be termed as "readily biodegradable".
A copy of this certificate is available on request.

The fine magnesium stearate particles combined with an outstanding dispersion stability of the antitack agent (slight movement of the bath is recommended) show after drying on the surface of the compound an evenly spread, almost transparent film.

The magnesia stearate, which remains on the surface of treated unvulcanized rubber sheets or strips, already melts at approx. 110 °C. After melting it penetrates into the rubber compound and does not influence the physical properties or rubber-metal (or rubber-textile) bonding, if recommended dilution ratios are applied. Better de-molding properties of the vulcanized articles can be expected (cracking temperature of magnesium stearate > 350 °C).

This can also be expected if Antitack BTO-31 LF is used for Barwell equipment. No mold fouling or negative influence on surface quality of treated rubber parts will occur.

Antitack BTO-31 LF is also used for the treatment of profiles or hoses after extrusion to avoid sticking before and during vulcanization (e. g. in autoclaves).

Many well known companies already have Antitack BTO-31 LF in use and confirmed the excellent properties of this product. The most important points they mentioned were:

- the surface of treated rubber parts seems to be clean even at a dilution ratio of 1 : 10, due to the very fine particle size of the used magnesium stearate and the excellent stability of the dispersion
- no foaming problems
- pollution of batch-off-equipment (crusts, "stalactites") is minimized compared to the use of "normal" antitack agents based on zinc stearate or products containing fillers (e. g. silica, chalk, bentonite)
- due to the excellent efficiency, Antitack BTO-31 LF can be used at high dilution rates. This results in lower costs for material **and** cleaning periods.

Due to special additives the concentration of the dispersion can be evaluated by conductivity. Therefore the work-intensive determination of the dry residue can be nearly eliminated. When an automatic dosing system is connected to the conductimeter, a continuous running of the batch-off system at a stable concentration can be achieved.

Antitack BTO-31 LF should be stirred before use.
It is also recommended to stir the concentrated Antitack BTO-31 LF after longer storage again before use. A decrease in viscosity will result (thixotropic effect).

Dilution ratio for first tests: 1:15 (Antitack BTO-31 LF : H_2O)

Properties

Chemical Characteristics		magnesium stearate in combination with detergents, antirust and antifoam agents
Appearance		white paste of medium viscosity
Density at 20 °C	(g/cm^3)	approx. 1.02 (mathematically)
Dry Matter (0.5 g/15 min./109 °C)	(%)	29.0 ± 2.5
pH-value at 20 °C (dilution ratio 1 + 10)		9.5 ± 1.0
Physiol. Behavior		see safety data sheet
Storage Stability		2 years at room temperature in original sealed drums
Packing		plastic drums containing 100 kg net or in one-way containers with 800 kg net content

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