KETTLITZ-Antitack BTO-33

- technical leaflet -

Antitack BTO-33 is a magnesium stearate dispersion, developed as an improvement of the well-known zinc stearate dispersion Antitack NP-97 which has proved itself since many years (see NP-97-Story in our Antitack Agents Brochure). It is suitable especially for the treatment of rubber sheets, strips or granules in batch-off dip tanks or "simple" dip tanks.

Antitack BTO-33 does not contain any heavy metal ions and can therefore replace zinc stearate dispersions. This antitack agent was developed considering latest ecological aspects. All included ingredients are biodegradable.

The particularity of Antitack BTO-33 is that the magnesium stearate particles are partially hydrophobic due to the special production process. After dilution in water the pigments rise to the upper levels of the antitack bath. Therefore the uncured rubber sheets always pass an area of high concentration and get treated very well. The partial hydrophobic character also leads to a faster drying of the layer on treated rubber parts. When using Antitack BTO-33 in batch-off dip tanks we recommend to circulate (pump or stir) the antitack bath.

The magnesium stearate melts during vulcanization and most of it is absorbed by the compound. The melting point of the pure magnesium stearate is approx. 140 °C. We noticed in our trials that the material of the layer on rubber is an eutectic mixture which melts already at 110 °C. If the recommended dilution ratio is used, the physical properties of the compounds are not influenced.

Due to the strong layer on the rubber surface it can be controlled visual. We recommend an incorporation of the antitack agent before vulcanization.

For first trials we recommend a dilution ratio of about 1:10 (Antitack BTO-33:H_2O).

Antitack BTO-33 (concentrate) should be stirred before use. This will result in lower viscosity and therefore easier handling. It is also recommended to stir Antitack BTO-33 after large storage again before use. A decrease in viscosity will be noted (thixotropic effect).

Physical Properties

Chemical Characteristics		fine magnesium stearate evenly dispersed in water
Appearance		white paste of medium viscosity
Density at 20 °C	(g/cm^3)	approx. 1.01 (mathematically)
Dry Matter (0.5 g/15 min./109 ° C)	(%)	20.0 ± 2.5
pH-Value at 20 °C (diluted 1 + 10)		9.0 ± 1.0
Conductivity (diluted 1 + 10)	(mS/cm)	0.7 ± 0.1
Physiol. Behavior		see safety data sheet
Storage Stability		2 years at room temperature in original sealed drums
Packing		plastic drums containing 100 kg net