

# Product Data Sheet Lucobatch®

## Product description

Lucobatch® 7500MB is a halogen free Masterbatch which enhances flame retardants by means of Nano particles. The **Nano particles char** when flame is applied.

Recommended dosage 8%-10%

The properties of Lucobatch® 7500MB are in compliance with VDE 0207 part 24(HM 2/4), VDE 0207 part 23 (HJ2), BS 6724 as well as other power and telecom standards.

## Applications and markets

Target markets include – among others – power and telecom cables as well as construction and optical fiber cables.

Lucobatch® 7500MB is designed in order to avoid both smoke and corrosive gases in case of a fire. Cables in trains, ships, tunnels, office buildings, public houses and off-shore installations are only some examples.

Due to its low water absorption, excellent low temperature properties and good ageing resistance Lucobatch® 7500MB is specifically suited for the following applications:

Cables in wet areas

- ▶ Ships and marine
- ▶ Outdoor
- ▶ Channels
- ▶ Off-shore

Cables in cold areas

- ▶ Regions with harsh winters
- ▶ Refrigerated rooms Outdoor
- ▶ Snowy/icy conditions

Cables in hot areas

- ▶ Regions with long summers
- ▶ Outdoor
- ▶ Areas at elevated temperatures Long life time required

## Packaging

Granules in 25 kg bag

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## Recommended processing and handling conditions:

### Extruder

Using an extruder with an L/D ratio (length/diameter) of 15- 24 is recommended.

### Screw

As a zero halogen low smoke material Lucobatch® 7500MB has a melt viscosity higher than PE/PVC. Lucobatch® 7500MB requires more power during processing possibly leading to an increase of melt temperature with increasing screw speed.

Using a low compression, low shear screw is recommended. A compression ratio of 1,2 : 1 is ideal. The compression ratio should not exceed 2,5 : 1.

The recommended screw water temperature is 30 °C - 50 °C.

### Screen pack

The recommended size of the screw pack is 300 µm.

## Head and tool design

The head and tools should be designed as to give streamlined flow. Lucobatch® 7500MB can be used for tubing as well as pressure techniques. In case of a tubing technique, the draw down ratio is to be kept low to avoid internal stresses. The recommended draw down ratio is 1,5 : 1.

## Drying

Usually, pre-drying of 7500MB is not necessary if the compound has been stored in a dry area at ambient temperatures without exposure to direct sunlight. However, if the melt temperature is expected to rise above 170 °C, or if Lucobatch® 7500MB has been stored under humid conditions, or if Lucobatch® 7500MB has been stored for some longer time, it may be advisable to dry the material prior to extrusion. We recommend a drying temperature of 60 °C – 70 °C for some hours.

### **Note**

The information provided in this document is based on our product tests and present technical knowledge. It does not release purchasers from the responsibility of carrying out their receiving inspections. Neither does it imply any binding assurance of suitability of our products for a particular purpose. As LUCOBIT cannot anticipate or control the many different conditions under which this product may be processed and used this information does not relieve processors from their own tests and investigations. Any proprietary rights as well as existing legislation shall be observed.