

## Product Specification

## TEGO® Sulpho 2

## Product description

TEGO® Sulpho 2 is a liquid product based on polyether modified polysiloxane.

## Physical properties

Appearance/color	Yellowish
Active matter	100 %
Density [25 °C]	1.04 – 1.06 g/ml
Dynamic Viscosity [25 °C]	650 – 1 050 mPas
Cloud point (4 % in H <sub>2</sub> O)	55 – 61 °C
Flash point	> 90 °C

## Application

TEGO® Sulpho 2 is used as a shaping and release agent on steel conveyor belts during sulphur pastillizing processes.

TEGO® Sulpho 2 represents the 2<sup>nd</sup> generation of these kind of additives, and was specifically developed for spraying a thin film of aqueous solution onto steel conveyor belts.

It can be alternatively applied by roller coating.

Additionally, TEGO® Sulpho 2 is especially well suited for use in climatically warmer regions where high temperatures prevail.

## Dosage and Handling

By using spraying technology during sulphur pastillizing processes, 5 – 15 wt% of aqueous solutions of TEGO® Sulpho 2 is sprayed onto the steel conveyor belt as a thin film, shortly before droplets of molten sulphur are deposited on the steel belt (e.g. through the IPCO Rotoformer).

The speed of the conveyor belt determines the required dosage of TEGO® Sulpho 2 which is influenced by the desired production rate and quality of pastilles.

If the release agent is applied onto steel conveyor belts by roller coater systems, it is recommended that a ~3 % aqueous solution of TEGO® Sulpho 2 is applied.

For the preparation of aqueous solutions, TEGO® Sulpho 2 should be slowly poured into water with continuous gentle agitation until a homogeneous mixture is obtained.

## Benefits / Properties

- TEGO® Sulpho 2 is simpler to handle and improves worker safety.
- TEGO® Sulpho 2 is water-soluble and provides clear and stable aqueous solutions (no flocculation) at temperatures below its cloud point (55 – 61 °C).
- In its function as a shaping additive:
  - TEGO® Sulpho 2 helps achieve premium quality pastilles of a highly uniform, hemispherical shape, enabling a premium spec. quality according to SUDIC (Sulphur Development Institute of Canada) tests.
- In its capacity as release agent:
  - TEGO® Sulpho 2 eliminates the possibility of damage to the pastilles by simplifying the separation of solid pastilles from the belt's metal surface when discharged from the conveyor belt.
  - This also significantly prolongs the lifespan of the knives used to scrape the pastilles off the belt.
- TEGO® Sulpho 2 prevents agglomeration (clumping) of the sulphur pastilles, which ensures free flowing behaviour of the bulk material.
- Highly uniform pastilles of premium quality with low friability and high impact abrasion resistance.
- Better flow characteristics that result in much less visual dust.

- Aqueous solutions at the recommended dosages of TEGO® Sulpho 2
  - are easily prepared due to the product's excellent water solubility.
  - stay clear and homogeneous at outside temperatures, of up to 50 °C.
  - are shear stable.
  - show a low foaming tendency.
  - provide a cloud point that fits excellently to pastillizing operating conditions.
  - enables a long-term continuance of the operation.
  - do not cause stickiness or deposits on the conveyor belt.
  - ensures easier cleaning of the conveyor belt.

### Storage stability

TEGO® Sulpho 2 may be stored for at least 12 months upon delivery under the condition that it is kept in factory-sealed packaging and protected against extreme weather conditions, particularly against heat, cold and moisture, in a temperature range between 5 – 50 °C.

### Packaging

25 kg drums (Pallet at 300 kg = 12 x 25 kg)  
 210 kg drums (Pallet at 840 kg = 4 x 210 kg)  
 Container at 1 000 kg

### Registration status

TEGO® Sulpho 2 is listed in the following chemical inventories:

EINECS, TSCA, DSL, ENCS, AICS, ECL, PICCS, IECSC (China) and NZIOC

### Hazardous goods classification

Information concerning

- classification and labelling according to regulations for transport and for dangerous substances
- protective measures for storage and handling
- measures in case of accidents and fire
- toxicity and ecological effects

is given in our material safety data sheets.

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