

MIKROFINE[®] TSSC

MIKROFINE[®] TSSC is a chemical blowing agent for the production of structural foam products in the processing temperature range of 200-240 °C.

1 PRODUCT INFORMATION

Main constituent	:	p-Toluenesulfonylsemicarbazide CAS Number [10396-10-8] Mol. Formula C ₈ H ₁₁ SN ₃ O ₃ Mol.wt. 229
Physical form	:	Free flowing off white powder
Odour	:	Odorless
Solubility	:	Insoluble in water, acetone and toluene. Soluble in DMSO.
Gas composition	:	Mainly nitrogen and carbon dioxide
Health, safety & handling information	:	Relevant information can be found in sheet No. HPLA/MSDS/M/CBA/07

2 SPECIFIED PROPERTIES

Decomposition temperature (°C) (open capillary tube method)	:	222 ± 3
Volatility (% w/w)	:	0.5 max.
Gas content (ml/gm at STP)	:	135 ± 5
pH (4% aqueous suspension at 25°C)	:	7.5 ± 0.5
Average particle diameter (micron)	:	5.0 - 7.0

3 SPECIAL FEATURES

Due to its high decomposition temperature, MIKROFINE® TSSC can be used for extrusion and banbury compounding of plastics processed at higher temperature (where it is not possible to use Azodicarbonamide).

Addition of activators reduces the decomposition temperature of MIKROFINE® TSSC and thus permits its usage in vinyl plastisol, calendaring, and rigid PVC extrusion to get whiter products. This is otherwise possible only with higher loadings of titanium dioxide and that too with reduced physical properties.

MIKROFINE® TSSC can be dry blended with resins. However, in case of vacuum conveying, a wetting agent (like mineral oil) has to be added to ensure proper adherence.

4 APPLICATIONS

MIKROFINE® TSSC IS USED FOR :

- the production of injection moulded structural foam products with improved surface appearance. It is suitable for PS, PPO (NORYL), HIPS, ABS, PP, HDPE, rigid PVC and engineering plastics - because its decomposition temperature matches the processing temperature of these plastics.
- for the production of light coloured plastics.

MIKROFINE® TSSC is recommended for PVC calendaring applications where premature blowing on the rolls is not allowed.

5 DOSAGE

0.5 - 3 PHR depending on the polymer used and the extent of expansion required.

6 PACKING

MIKROFINE® TSSC is packed in 15 Kg UN approved corrugated cartons with a polythene liner inside or as per customer's requirement.

The information given in this document is only a recommendation, believed to be reliable and is given in good faith but without warranty. Our advice does not release users from the obligation of checking its validity. The user should test the product to ascertain the suitability for the intended use. Specified properties mentioned in this document are based on our historical production performance and these properties or the whole document is subject to change without any prior notice, at our sole discretion. We are under no obligation to recall earlier issued documents.

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