


HPL Additives Limited

MATERIAL SAFETY DATA SHEET

MIKROFINE[®] TSSC

1 IDENTIFICATION OF SUBSTANCE/PREPARATION AND COMPANY

Product name	:	p-Toluene Sulfonyl semicarbazide
Product code	:	MIKROFINE [®] TSSC
Product type	:	As a chemical blowing agent for PP, ABS, HIPS & engineering plastics
Supplier's name and address	:	HPL Additives Limited 803, Vishal Bhawan 95, Nehru Place New Delhi - 110019 (INDIA)
Contact Numbers	:	Telephone +91- 11- 2643 1522 +91- 11- 2642 1570 Fax +91- 11- 2647 4350 +91- 11- 2646 0981 e-mail hpl@hpl-group.com
Information	:	Product Compliance and Regulatory Affairs
Emergency Phone Number(24h)	:	+91-9910486232

2 HAZARDS IDENTIFICATION

Eye	:	May cause mechanical irritation
Skin	:	May cause skin irritation and possible burns
Ingestion	:	Harmful if swallowed. May cause irritation of the digestive tract
Inhalation	:	May cause pulmonary sensitization
Chronic	:	Effects may be delayed
Other Hazards	:	May form explosive dust-air mixture

3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	: p-Toluene Sulfonyl semicarbazide
CAS	: 10396-10-8
EINECS	: 233-857-6
Classification	: Class 4.1 Packaging group II
Risk Phrases	: R10, R22, and R42/43

4 FIRST AID MEASURES

Eye	: In case of eye contact, wash thoroughly with water. Seek medical advice.
Skin	: In case of skin contact, wash thoroughly with water and seek medical advice if necessary.
Ingestion	: If product is swallowed, transfer patient to hospital. Seek medical advice.
Inhalation	: Take patient into a well-ventilated area and seek medical advice if necessary.

5 FIRE FIGHTING MEASURES

Extinguishing media	: Water spray and dry chemicals
	Fires involving large amounts of material should not be approached because individual containers may rupture abruptly causing "fireball" effect. In case of fire nearby materials, soak containers with water.
	Do not breathe fumes and gases generated during decomposition or fire.
	During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
	Self contained breathing apparatus must be worn during fire fighting.

6 ACCIDENTAL RELEASE MEASURES

Use proper personal protective equipment

Product should not be allowed to enter into local drainage or sewer systems.

Any spillage should be removed, preferably by vacuum and stored in labeled containers.

Avoid generating dusty conditions.

Remove all source of ignition. Provide ventilation.

7 HANDLING AND STORAGE

- | | | |
|-----------------|---|---|
| Handling | : | <p>Wear protective clothing including breathing protection apparatus and safety goggles, or eye protection.</p> <p>Wash hands and face thoroughly after handling.</p> <p>Avoid ingestion and inhalation.</p> |
| Storage | : | <p>Keep product pack closed & dry and in original container.</p> <p>Store in a cool, dry, well-ventilated area away from incompatible substances.</p> <p>Keep container tightly closed when not in use.</p> <p>Keep away from direct sunlight and any source of ignition.</p> |

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

- | | | | | | | | | |
|--------------------------|---------------|---|-------|---------------|-------|---------------|------|---------------|
| Exposure Limits | : | <table> <tr> <td>ACGIH</td> <td>Not available</td> </tr> <tr> <td>NIOSH</td> <td>Not available</td> </tr> <tr> <td>OSHA</td> <td>Not available</td> </tr> </table> | ACGIH | Not available | NIOSH | Not available | OSHA | Not available |
| ACGIH | Not available | | | | | | | |
| NIOSH | Not available | | | | | | | |
| OSHA | Not available | | | | | | | |
| Exposure Controls | : | <p>Use adequate ventilation to keep airborne concentrations low. If vent inadequate use NIOSH/MSHA/European Standard EN 149 approved respirator.</p> <p>Wear appropriate protective eyeglasses or chemical safety goggles.</p> <p>Wear appropriate protective gloves and protective clothing to prevent skin exposure</p> <p>If user develops sensitivity to respiratory tract whilst using product, the user should not be exposed to the product any longer. Seek medical advice.</p> | | | | | | |

9 PHYSICAL AND TECHNICAL DATA

General Information

Appearance	:	Free flowing off white powder
Odour	:	Odourless

Important Health, Safety and Environmental Information

pH	:	Not available
Decomposition temperature	:	222 ± 3 °C
Flash point	:	Not available
Flammability	:	Flammable
Explosion properties	:	Not available
Vapour pressure	:	Not available
Density	:	Not available
Solubility	:	Insoluble in water
Viscosity	:	Not available
Vapour Density	:	Not available
Evaporation rate	:	Not available
Auto-ignition temperature	:	Not available

10 STABILITY AND REACTIVITY

Chemical Stability	:	Stable under normal temperatures and pressures
Conditions to avoid	:	Excess heat, ignition sources and dust generation
Materials to avoid	:	Strong oxidising agents, incompatible materials and strong oxidants.
Hazardous decomposition products	:	Major decomposition products are N ₂ , CO & CO ₂ Although MIKROFINE [®] TSSC decomposes quickly above 200°C, it can decompose slowly at lower temperatures. In a fire situation, the product will release dense fumes. In the presence of strong alkalis, acids & oxidizing agents it might react to produce hazardous products.

11 TOXICOLOGICAL INFORMATION

Harmful if swallowed, inhaled or absorbed through skin. May cause irritation.

Oral toxicity	:	LD 50 (rats) 10 g/kg
Irritation	:	Eye (rabbits).....Negative Skin (rabbits).....Negative
Genotoxicity	:	No information available
Carcinogenicity	:	Not listed by ACGIH, IARC, NIOSH, NTP or OSHA
Epidemiology	:	No information available
Teratogenicity	:	No information available
Reproductive effects	:	No information available
Neurotoxicity	:	No information available
Mutagenicity	:	No information available

12 ECOLOGICAL INFORMATION

No information available

13 DISPOSAL CONSIDERATIONS

Do not dispose off waste into water or drainage.
Dispose off as special must be in accordance with applicable local or national regulations.

14 TRANSPORTATION INFORMATION

ADR/RID/DOT/IMO/IMDG	:	
UN NUMBER	:	1325
Hazard Class	:	4.1
Packaging group	:	II
Proper Shipping Name	:	p-Toluene Sulfonyl semicarbazide

15 REGULATORY INFORMATION

INVENTORY STATUS

This product is listed in the following chemical inventories

TSCA	ENCS
DSL	AICS
EINECS	ASIA-PAC

EUROPEAN/INTERNATIONAL REGULATIONS

European Labeling in Accordance with EC Directives

Hazard Symbol

Xn : Harmful

Risk Phrases

R-10 : Flammable
 R-22 : Harmful if swallowed
 R42/43 : May cause sensitisation by inhalation and skin contact

Safety Phrases

S15 : Keep away from heat
 S16 : Keep away from sources of ignition. No smoking
 S22 : Do not breathe dust
 S24 : Avoid contact with skin
 S26 : In case of contact with eyes, rinse immediately with
 Take off immediately all contaminated clothing
 S36/37/39 : Wear suitable protective clothing and eye/face protection
 S41 : In case of fire and/or explosion do not breathe fumes

16 OTHER INFORMATION

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This document contains important information to ensure the safe storage, handling and use of this product. The information in this document should be brought to the attention of the person in your organisation responsible for advising on safety matters.

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 and to test our products as to their 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 call back earlier issued documents.