Material Safety Data Sheet	MOLYCHEM
p-TOLUENE SULFONYL CHLORIDE	VERSION : 02 DATE OF ISSUE : 26-08-2019 SUPERSEDES : 01
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1. Identification of the substance/mixture and of the company/undertaking **1.1. Product identifier Trade name : p-TOLUENESULFONYL CHLORIDE FOR SYNTHESIS** Product code : 19584 Identification of the product : p-TOLUENESULFONYL CHLORIDE98% CAS No :98-59-9 1.2. Relevant identified uses of the substance or mixture and uses advised against Use : Industrial. For professional use only. **1.3.** Details of the supplier of the safety data sheet **Company identification : MOLYCHEM** Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor, Mumbai – 400 002 (INDIA) Tel: +91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442. Email: info@molychem.net Works: Plot No. B/9, Badlapur M.I.D.C., OPP. Shobhavat Textile Co., Kulgaon, Badlapur (E), Dist.-Thane-421 503. **1.4. Emergency telephone number** Emergency number : +91 22 4066 8111 (10:00am - 6:00 pm). 2. Hazards identification -DSD 2.1. Classification of the substance or mixture Classification EC 67/548 or EC 1999/45 Classification : Xi: R38-41 Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP) Health hazards : Skin irritation - Category 2 - Warning (CLP : Skin Corr. 2) H315 Serious eye damage - Category 1 - Danger (CLP : Eye Dam. 1) H318 2.2. Label elements Labelling EC 67/548 or EC 1999/45 **Symbol**(s) : Xi : Irritant

R Phrase(s) : R38 : Irritating to skin.
R41 : Risk of serious damage to eyes.
S Phrase(s) : S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S39 : Wear eye/face protection.
Labelling Regulation EC 1272/2008 (CLP)
Hazard pictograms



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Signal words : Danger

Hazard statements : H318 : Causes serious eye damage.

H315 : Causes skin irritation.

Precautionary statements

• **Prevention** : P280: Wear protective gloves, protective clothing, eye protection, face protection.

P264: Wash thoroughly after handling.

• Response : P302+P352: IF ON SKIN : Wash with plenty of soap and water.

P332+P313: If skin irritation occurs : Get medical advice.

P305+P351+P338: IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P363: Wash contaminated clothing before reuse.

2.3. Other hazards

Other hazards : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

3. Composition/information on ingredients

Substance / Preparation : p-TOLUENESULFONYL CHLORIDE 98%

CAS No :98-59-9

Substance.

Contains no other components or impurities which will influence the classification of the product.

<u>4. First aid measures</u>

4.1. Description of first aid measures

Inhalation : Assure fresh air breathing. Allow the victim to rest.

Skin contact : Specific treatment (see on this label). Wash contaminated clothing before reuse. Wash with plenty of soap and water. If skin irritation occurs : Get medical advice. **Eye contact** : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Ingestion : Obtain emergency medical attention. Rinse mouth. Do NOT induce vomiting. **4.2. Most important symptoms and effects, both acute and delayed**

Symptoms relating to use : Causes serious eye damage.

Causes skin irritation.

4.3. Indication of any immediate medical attention and special treatment needed

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General information : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand. **Unsuitable extinguishing media** : Do not use a heavy water stream.

Surrounding fires : Use water spray or fog for cooling exposed containers.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products : Under fire conditions, hazardous fumes will be present.

5.3. Advice for fire-fighters

Protection against fire : Do not enter fire area without proper protective equipment, including respiratory protection.

Special procedures : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures For emergency responders : Equip cleanup crew with proper protection. Ventilate area.

For non-emergency personnel : Evacuate unnecessary personnel.

6.2. Environmental precautions

Environmental precautions : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Clean up methods : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

6.4. Reference to other sections

See section 8. Exposure controls/personal protection

7. Handling and storage

7.1. Precautions for safe handling

Handling : Wash thoroughly after handling. Wash thoroughly after handling.

Technical protective measures : Provide good ventilation in process area to prevent formation of vapour.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.

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Storage - away from : Strong bases. Strong acids. Sources of ignition. Direct sunlight. 7.3. Specific end use(s) **Specific end use(s)** : None. 8. Exposure controls/personal protection 8.1. Exposure controls **Personal protection** : Avoid all unnecessary exposure. • **Respiratory protection** : Wear approved mask. • Hand protection : Wear protective gloves. • Skin protection : Wear suitable protective clothing. • Eve protection : Chemical goggles or safety glasses. • Others : When using, do not eat, drink or smoke. **8.2.** Control parameters Occupational Exposure Limits : No data available. 9. Physical and chemical properties 9.1. Information on basic physical and chemical properties **Physical state at 20** °C : Solid. **Odour threshold** : No data available. **pH value** : Not applicable. **Melting point** [°C] : 66 - 69 °C **Decomposition point** [°C] : N/A **Critical temperature** [°C] : N/A Auto-ignition temperature [°C] : N/A Flammability (solid, gas) : N/A Flash point [°C] : 128 °C **Boiling point** [°C] : 134 °C **Initial boiling point** [°C] : N/A **Final boiling point** [°C] : N/A **Evaporation rate : N/A** Vapour pressure [20°C] : N/A Vapour pressure mm/Hg : N/A Vapour density : N/A **Density** [g/cm3] : 1,49 **Relative density, gas (air=1)** : N/A Relative density, liquid (water=1) : N/A **Solubility in water [% weight]** : Hydrolysis Solubility in water : N/A Log Pow octanol / water at 20°C : No data available. **Solubility** : N/A

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Viscosity at 40°C [mm2/s] : N/A 9.2. Other information Explosive properties : N/A Explosion limits - upper [%] : N/A Explosion limits - lower [%] : N/A Oxidising properties : No data available.

10. Stability and reactivity

10.1. Reactivity

Reactivity : Not established.

10.2. Chemical stability

Chemical stability : Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : Not established.

10.4. Conditions to avoid

Conditions to avoid : Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Materials to avoid : Strong acids. Strong bases.

10.6. Hazardous decomposition products

Hazardous decomposition products : Fumes. Carbon monoxide. Carbon dioxide.

<u>11. Toxicological information</u>

11.1. Information on toxicological effects

Acute toxicity

• Inhalation : Based on available data, the classification criteria are not met.

• **Dermal** : Based on available data, the classification criteria are not met.

• Ingestion : Based on available data, the classification criteria are not met.

Corrosion : Causes serious eye damage.

Irritation : Causes skin irritation.

Sensitization : Based on available data, the classification criteria are not met.

Mutagenicity : Based on available data, the classification criteria are not met.

Carcinogenicity : Based on available data, the classification criteria are not met.

Toxic for reproduction : Based on available data, the classification criteria are not met.

STOT-single exposure : Based on available data, the classification criteria are not met. **STOT-repeated exposure** : Based on available data, the classification criteria are not met.

Aspiration hazard : Based on available data, the classification criteria are not met.

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<u>12. Ecological information</u>

12.1. Toxicity

Toxicity information : Not established.

12.2. Persistence - degradability

Persistence - degradability : Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential : Not established.

12.4. Mobility in soil

Mobility in soil : Not established.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

12.6. Other adverse effects

Environmental precautions : Avoid release to the environment.

<u>13. Disposal considerations</u>

13.1. Waste treatment methods

General : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

<u>14. Transport information</u>

14.1. Land transport (ADR-RID)

Proper shipping name : CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.

UN N° : 3261

H.I. nr : 80

ADR - Class : 8

Labelling - Transport : 8 : Corrosive substance.

ADR - Classification code : C4

ADR - Group : II

ADR - Packing instructions : P002

ADR - Limited Quantity : 1 KG

ADR - Tunnel code : E : Passage forbidden through tunnels of category E.

14.2. Sea transport (IMDG) [English only]

Proper shipping name : CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.

UN N° : 3261

IMO-IMDG - Class or division : 8 : Corrosive substance.

IMO-IMDG - Packing group : II

IMO- IMDG - Packing instructions : P002

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IMO-IMDG - Limited quantities : 1 kg **IMO-IMDG - Marine pollution** : No EMS-Nr : F-A S-B 14.3. Air transport (ICAO-IATA) [English only] **Proper shipping name** : CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. **UN N°** : 3261 **IATA - Class or division** : 8 : Corrosive substance. IATA - Packing group : II IATA - Passenger and Cargo Aircraft : ALLOWED - Passenger and Cargo - Packing : 859 instruction - Passenger and Cargo - Maximum : 15 kg **Quantity/Packing** IATA - Cargo only : ALLOWED - Cargo only - Packing instruction : 863 - Cargo only - Maximum Quantity/: 50 kg Packing IATA - Limited Quantites : 5 kg ERG-Nr:8L **15. Regulatory information** 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture **Safety, health and environmental** : Ensure all national/local regulations are observed. regulations/legislation specific for the substance or mixture **REACH Restrictions - Annex XVII**: The components of this product are not subject to restrictions. **REACH Authorisation - Annex XIV** : The components of this product are not subject to authorization. **15.2.** Chemical Safety Assessment Chemical Safety Assessment : It has not been carried out. **16. Other information** Abbreviations and acronyms : PBT: persistent, bioaccumulative and toxic. vPvB: very persistent and very bioaccumulative Sources of key data used : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives

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67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 **Further information** : None.

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End of document Prepared by: MOLYCHEM (INDIA)

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