



SAFETYDATASHEET

p-Toluenesulfonyl isocyanate **Product Name:**

2022-02-28 **Effective Date:**

Chen Yushuang Compiler:

Checker:

Liu Linlin Bhangsciavy in Approver:

Shanghai Institute of Chemical Industry Testing Co., Ltd.



PINGYUAN XINDA CHEMICAL CO., LTD.

SAFETY DATA SHEET

p-Toluenesulfonyl isocyanate

SECTION1 PRODUCT AND COMPANY IDENTIFICATION

Product name:

p-Toluenesulfonyl isocyanate

Company:

PINGYUAN XINDA CHEMICAL CO., LTD.

Address:

Fangzi Township, Pingyuan County, Shandong Province, 253100, P. R. China

Email:

xhs@xdchem.com.cn

Fax:

86-534-4210998

Emergency Phone:

86-534-4665666

Recommend use of the chemical and restrictions on use: Coting, adhesive.

SDS Number:

2622020061

Effective Date:

2022-02-28

SECTION2 HAZARDS IDENTIFICATION

GHS Classification:

Physical Hazards:

Not Classified

Health Hazards:

Acute toxicity-Oral Category 5

Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2

Respiratory sensitization Category 1

Skin sensitization Category 1

Specific target organ toxicity-Single exposure Category 3 (Respiratory tract irritation)

Environmental Hazards:

Classification not possible

The hazards not mentioned are not applicable or no data available.

Label Elements:

Pictogram:



Signal Word:

Danger

Hazard Statements:

H303 May be harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

Prevention Precautionary Statements:

P280 Wear protective gloves / eye protection /face protection.

P264+P265 Wash hands thoroughly after handling. Do not touch eyes.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P284 [In case of inadequate ventilation] wear respiratory protection.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

Response Precautionary Statements:

P301+P317 IF SWALLOWED: Get medical help.

P302+P352 IF ON SKIN: Wash with plenty of water.

P333+P317 If skin irritation or rash occurs: Get medical help.

P362+P364 Take off contaminated clothing and wash it before reuse.

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

P337+P317 If eye irritation persists: Get medical help.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P342+P316 If experiencing respiratory symptoms: Get emergency medical help immediately.

P319 Get medical help if you feel unwell.

Storage Precautionary Statements:

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Disposal Precautionary Statements:

P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

Other Hazards:

No data available.

SECTION3 INFORMATION ON INGREDIENTS

Product name:

p-Toluenesulfonyl isocyanate

Ingredient	Concentration	CAS No.	EC No.
Substances:			
p-Toluenesulfonyl isocyanate	99. 29%	4083-64-1	223-810-8
Tosyl chloride	0.71%	98-59-9	202-684-8

SECTION4 FIRST-AID MEASURES

Skin Exposure:

In case of skin contact, flush with copious amounts of water. If skin irritation or rash occurs, Call a physician.

Eye Exposure:

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. If irritation persists, Call a physician.

Inhalation Exposure:

If inhaled, remove to fresh air immediately. If the person feels unwell, Call a physician.

Oral Exposure:

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Most Important Symptoms/Effects, Acute and Delayed:

No data available.

Indication of Immediate Medical Attention and Special Treatment Needed, if Necessary:

No data available.

SECTIONS FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Suitable: Dry chemical, Carbon dioxide.

Unsuitable: Water.

Specific Hazards Arising from the Chemical:

Take care as it may decompose upon combustion or in high temperatures to generate Carbon oxides, nitrogen oxides, sulfur oxides, hydrogen chloride gas.

Special Protective Action for Fire-fighters:

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Fire-extinguishing work is done from the windward. Uninvolved persons should evacuate to a safe place.

SECTION6 ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Use personal protective equipment. Ensure adequate ventilation. Avoid breathing vapors, mist or gas. Cut off the source of the leakage as far as possible. Remove all ignition sources. Keep away from or be upwind of leakage or spillage area. Unnecessary personnel are prohibited from entering.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Avoid entering drains.

Methods and Materials for Containment and Cleaning up:

Mix with inert material (e.g. dry sand, vermiculite) and transfer to a dry, clean, lidded container for disposal. Using non-sparking tools. Avoid inhalation. Ventilate area and wash spill site after material pickup is complete.

SECTION7 HANDLING AND STORAGE

Precautions for Safe Handling:

Operators should be trained and strictly abide by operating procedures. Wear appropriate protective clothing and gloves. Avoid inhalation. Avoid contact with skin, eyes and clothing. Prevent generation of vapor or mist. Handling is performed in a well ventilated place. Keep away from ignition sources, heat and flame. Incompatibilities: Water, alcohols, amines, strong acids, strong bases, strong oxidizing agents. Handling and unloading should be light, to prevent packaging broken, damp and cause losses. Working place should be equipped with appropriate varieties and quantities of fire fighting equipment and leakage emergency treatment equipment.

Conditions for Safe Storage, Including Any Incompatibilities:

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Keep away from ignition sources, heat and flame. Incompatibilities: Water, alcohols, amines, strong acids, strong bases, strong oxidizing agents. Storage place should be equipped with appropriate varieties and quantities of fire fighting equipment and leakage emergency treatment equipment.

SECTION8 EXPOSURE CONTROL/PPE

Control Parameters:

GBZ 2.1-2019 Occupational Exposure Limits for Hazardous Agents in the Workplace - Part 1: Chemical Hazardous Agents:

Not set up.

ACGIH:

Not set up.

Appropriate Engineering Controls:

Mechanical exhaust required. Safety shower and eye bath.

Individual Protection Measures:

Eye/Face Protection:

Wear chemical safety glasses.

Skin Protection:

Hand Protection: Wear compatible protective gloves. Body Protection: Wear appropriate protective clothing.

Respiratory Protection:

Wear government approved respirator.

Thermal Hazards:

No data available.

Other Protect:

No smoking, drinking and eating at working site. Wash thoroughly after handling.

SECTION9 PHYSICAL/CHEMICAL PROPERTIES

Appearance:

Colorless transparent liquid

Odor:

Weak penetrating odor

pH Value:

Not applicable

Solubility:

Not applicable (reacting with water violently)

Boiling Point,

No data available

Initial Boiling

Point and Boiling

Range:

Melting

No data available

Point/Freezing

Point:

Flash Point

>96.0°C

(Closed Cup):

Density/Relative

No data available

Density:

Kinematic

No data available

Viscosity:

Lower/Upper

No data available

Explosion

Limit/Flammabili

ty Limit:

Vapour Pressure:

No data available

Relative Vapor

No data available

Density:

Partition

No data available

Coefficient

N-Octanol/Water(

Log Value):

Autoingnition

No data available

Temperature:

Decomposition

No data available

Temperature:

Particle

No data available

Characteristics:

Flammability

Not applicable

(Solid, Gas):

SECTION10 STABILITY AND REACTIVIT

Reactivity:

No data available.

Chemical Stability:

Stable under normal temperatures and pressures.

Possibility of Hazardous Reactions:

Reacts violently with water.

Conditions to Avoid:

Exposure to water. Exposure to air or moisture. Excessive heat.

Incompatible Materials:

Water, alcohols, amines, strong acids, strong bases, strong oxidizing agents.

Hazardous Decomposition Products:

Carbon oxides, nitrogen oxides, sulfur oxides, hydrogen chloride gas.

SECTION11 TOXICOLOGICAL INFORMATION

Acute Toxicity:

p-Toluenesulfonyl isocyanate: LD₅₀ Oral - Rat - 2234 mg/kg Remarks: (RTECS) Tosyl chloride: LD₅₀ Oral - Rat - 4680 mg/kg

Skin Corrosion/Irritation:

Causes skin irritation.

Serious Eye Damage/Irritation:

Causes serious eye irritation.

Respiratory Sensitization:

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin Sensitization:

May cause an allergic skin reaction.

Carcinogenicity:

No data available.

Germ Cell Mutagenicity:

No data available.

Reproductive Toxicity:

No data available.

Specific Target Organ Toxicity -Single Exposure:

May cause respiratory irritation.

Specific Target Organ Toxicity -Repeated Exposure:

No data available.

Aspiration Hazard:

No data available.

SECTION12 ECOLOGICAL INFORMATION

Toxicity:

No data available.

Persistence and Degradability:

No data available.

Bioaccumulative Potential:

No data available.

Mobility in Soil:

No data available.

Other Adverse Effects:

No data available.

SECTION13 DISPOSAL CONSIDERATION

Disposal Methods:

Recycle as far as possible. If unable to recycle, it is recommended to use incineration method for disposal under supervision. This product should not be disposed of by discharge into sewers. Return empty containers to the manufacturer or dispose of them in accordance with national and local regulations. Follow the relevant provisions of national and local regulations before disposal. It is recommended to be disposed of by a qualified chemical waste treatment department.

SECTION14 TRANSPORT INFORMATION

RID/ADR (2021

The product is not subject to RID/ADR.

Edition):

IATA DGR (63rd

The product is not subject to IATA DGR.

Edition):

IMO IMDG

The product is not subject to IMO IMDG Code.

CODE (2020

Edition):

Environmental No.

Mo

Hazards:

Special

No data available.

Precautions for

User:

Transport in Not applicable.
Bulk according
to Annex II of
MARPOL 73/78 and
the IBC Code:

SECTION15 REGULATORY INFORMATION

Montreal Protocol:

Not listed.

Stockholm Convention:

Not listed.

Rotterdam Convention:

Not listed.

EINECS/ELINCS:

All ingredients in the product are listed.

TSCA:

All ingredients in the product are listed.

IECSC:

All ingredients in the product are listed.

SECTION16 OTHER INFORMATION

Preparation Date:

2022-02-28

Preparation Department:

Shanghai Research Institute of Chemical Industry Testing Co., Ltd. Tel(Fax): +86-21-52815377/31765555

Revision:

0

Reference Standard:

GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS), 9th revised edition

Abbreviations and Acronyms:

CAS: Chemical Abstracts Service EC: European Commission ACGIH: American Conference of Governmental Industrial Hygienists LD₅₀: Lethal dose, 50% RTECS: Registry of Toxic Effects of Chemical Substances ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road RID: Regulations concerning the International Carriage of Dangerous Goods by Rail IMO IMDG CODE: International Maritime Organization International Maritime Dangerous Goods Code IATA DGR: International Air Transport Association Dangerous Goods Regulations MARPOL: International Convention for the Prevention of Pollution from Ships IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances TSCA: Toxic Substances Control Act IECSC: Inventory of Existing Chemical Substances in China

Other Information:

This SDS is compiled based on the information such as ingredients provided by the applicant and our current knowledge. This SDS shall be used only as a guide. The users of this SDS must make independent judgments on the correctness and completeness and then decide its suitability according to the actual situation. The users should take the relevant legal responsibilities for the consequences of use.