Material Safety Data Sheet

Vinyl Toluene

Version: 2.0 EN

Revision Date: 2025-1

SECTION 1: IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

1.1 Product identifiers

Product Name	Vinyl Toluene
CAS No	25013-15-4
Synonyms	Methylstyrene, Vinyltoluene

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use	Chemical intermediate,For research and industrial use only

1.3 Details of the supplier of the safety data sheet

Company	China lithium Products technology Company Limited
	9 HG, No.99 LuJiang Road, Xiamen city, China
Telephone	+86 592 2687860
Email	info@lithium-chemical.com

1.4 Emergency telephone number

Emergency phone #	+86 592 2687860

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flammable liquids (Category 3), H226

Acute toxicity, Inhalation (Category 4), H332

Skin irritation (Category 2), H315

Eye irritation (Category 2), H319

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

Aspiration hazard (Category 1), H304

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal Word Danger

Hazard Statements

H226	Flammable liquid and vapor
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation

H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation

Precautionary Statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P301 + P310 + P331	IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting
P302 + P352	IF ON SKIN: Wash with plenty of water
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Hazard Statements

No data available

Precautionary Statements

No data available

Supplemental Hazard Statements

None

2.3 Physical and chemical hazards

Referring to current information, no physical or chemical hazard

Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Substance name	Vinyl Toluene
Formula	C_9H_{10}
CAS No	25013-15-4
EC No	246-562-2

Hazardous ingredients: Vinyl toluene, Classification: Flam. Liq. 3; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; Asp. Tox. 1; H226, H332, H315, H319, H335, H304; Concentration: <= 100 %

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General notes

Show this material safety data sheet to the doctor in attendance

If inhaled

fresh air. Call in physician

In case of skin contact

Wash off with soap and plenty of water. Consult a physician

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Dry powder Dry sand

Unsuitable extinguishing media

Do NOT use water jet

5.2 Special hazards arising from the substance or mixture

Carbon oxides

5.3 Advice for firefighters www.lithium-chemical.com

Wear self-contained breathing apparatus for firefighting if necessary

5.4 Further information

None

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert

For personal protection see section 8

6.2 Environmental precautions

Prevent further spillage or leakage if it is safe to do so, Do not let the chemical enter drains, Discharge into the environment must be avoided

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal

6.4 Reference to other sections

For disposal see section 13

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist

Keep away from sources of ignition-No smoking. Take measure to prevent the buildup of electrostatic charge

For precautions see section 2

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep container tightly closed in a dry and well ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage

Storage class

Storage class (TRGS 510): Flammable liquids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Ingredients with workplace control parameters

No data available

8.2 Exposure controls

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Skin protection

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber

Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

Respiratory protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 should be followed. Check with respiratory protective equipment suppliers

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Form: liquid Colour: colorless
Odour	No data available
Odour Threshold	No data available
pH	No data available
Melting point/freezing point	ca.-77,0 °C at 1.013 hPa
Initial boiling point and boiling range	168 °C - lit
Flash point	52°C (126o F) –Closed cup
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	Upper explosion limit: 5,2 %(V) Lower explosion limit: 1,1 %(V)
Vapour pressure	Ca.2,0 hPa at 20 °C
Density	0,893 g/cm3 at 25 °C - lit
Relative density	No data available
Water solubility	Ca.0,089 g/l at 25 °C
Partition coefficient: n- octanol/water	log Pow: 3,35 at 25 °C
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	Viscosity, kinematic: ca.0,93 mm2/s at 20 °C
Explosive properties	No data available
Oxidizing properties	No data available

9.2 Other safety information

Surface tension	Ca.31,66 mN/m at 20 °C

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No additional information available

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Heat, flames and sparks

10.5 Incompatible materials

Strong oxidizing agents, Strong acids

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions- Carbon oxides e

Other decomposition products- no data available

In the event of fire: see section 5

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:	LD50 Oral- Rat- 3,275 mg/kg LC50 Inhalation –Rat- 4 h – 16.891 mg/l LD50 Dermal- Rabbit- >4,400 mg/kg
Skin corrosion/irritation:	Skin- Rabbit Result: Skin irritation
Serious eye damage/eye irritation:	Eyes- Rabbit Result: Eye irritation

Respiratory or skin sensitization:

No data available

Germ cell mutagenicity:

No data available

Carcinogenicity

May cause cancer by inhalation

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

May be fatal if swallowed and enters airways

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish	Static test LC50- Pimephales promelas (Fathead minnow) – 5.2 mg/l – 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	Immobilization EC50 - Daphnia magna (Water flea) - 1,3 mg/l - 48 h (OECD Test Guideline 202)

Toxicity to algae	Growth inhibition EC50 - Selenastrum capricornutum (green algae) - 2,6 mg/l - 72 h (OECD Test Guideline 201)

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher

12.6 Other adverse effects

Toxic to aquatic life

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself

Remarks

Dispose of as unused product

SECTION 14: TRANSPORT INFORMATION

ADR/RID

UN number：2618	Packing group: III	Environmental hazards：No
Proper shipping name： VINYLTOLUENES, STABILIZED	Transport hazard class(es)：3	

IMDG

IMDG UN number： 2618	Packing group: III	Environmental hazards：No
Proper shipping name： VINYLTOLUENES, STABILIZED	Transport hazard class(es): 3	

IATA

UN number：2618	Packing group: III	Environmental hazards：No
Proper shipping name: VINYLTOLUENES, STABILIZED	Transport hazard class(es)：3	

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

National legislation

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances

FLAMMABLE LIQUIDS

15.2 Other regulations

For this product a chemical safety assessment was not carried out

SECTION 16: OTHER INFORMATION

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. China Lithium Product Technology Co., Ltd.(CLPC) and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.lithium-chemical.com for additional terms and conditions of sale.