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ALFAAA15974

# 2,4,6-Trimethylstyrene

### SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

产品说明:	2,4,6-三甲基苯乙烯, 95%, 含 500ppm 4-叔-丁基邻苯二酚
Product Description:	2,4,6-Trimethylstyrene
Cat No. :	<b>A15974</b>
CAS No	769-25-5
Molecular Formula	C11H14
Supplier	Avocado Research Chemicals Ltd. (Part of Thermo Fisher Scientific) Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom Office Tel: +44 (0) 1524 850506 Office Fax: +44 (0) 1524 850608
Emergency Telephone Number	For information <b>US</b> call: 001-800-227-6701 / <b>Europe</b> call: +32 14 57 52 11 Emergency Number <b>US:</b> 001-201-796-7100 / <b>Europe:</b> +32 14 57 52 99 <b>CHEMTREC</b> Tel. No. <b>US:</b> 001-800-424-9300 / <b>Europe:</b> 001-703-527-3887
E-mail address	begel.sdsdesk@thermofisher.com
Recommended Use	Laboratory chemicals.
Uses advised against	No Information available

# **SECTION 2. HAZARD IDENTIFICATION**

Physical	State
Liqui	d

Appearance Colourless - Yellow Odor No information available

**Emergency Overview** 

The product contains no substances which at their given concentration are considered to be hazardous to health.

#### <u>Classification of the substance or mixture</u> Based on available data, the classification criteria are not met

#### Label Elements

None required

#### Storage

P403 - Store in a well-ventilated place **Disposal** P501 - Dispose of contents/ container to an approved waste disposal plant

#### **Physical and Chemical Hazards**

# None identified.

Health Hazards

The product contains no substances which at their given concentration are considered to be hazardous to health.

#### 2,4,6-Trimethylstyrene

#### Environmental hazards

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

Contains a known or suspected endocrine disruptor. Contains a substance on the National Authorities Endocrine Disruptor Lists.

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight %
2,4,6-Trimethylstyrene	769-25-5	>95
4-tert-Butyl catechol	98-29-3	<0.1

### **SECTION 4. FIRST AID MEASURES**

#### **General Advice**

If symptoms persist, call a physician.

#### Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately if symptoms occur.

#### Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.

#### Inhalation

Remove to fresh air. Get medical attention immediately if symptoms occur. If not breathing, give artificial respiration.

#### Ingestion

Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

#### Most important symptoms and effects

None reasonably foreseeable.

#### Self-Protection of the First Aider

Use personal protective equipment as required.

#### Notes to Physician

Treat symptomatically.

#### **SECTION 5. FIRE-FIGHTING MEASURES**

#### Suitable Extinguishing Media

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers.

#### Extinguishing media which must not be used for safety reasons

No information available.

#### **Specific Hazards Arising from the Chemical**

Keep product and empty container away from heat and sources of ignition. Risk of ignition. Combustible material. Containers may explode when heated.

#### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

#### **Personal Precautions**

### 2,4,6-Trimethylstyrene

Use personal protective equipment as required. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.

#### **Environmental Precautions**

Should not be released into the environment.

#### Methods for Containment and Clean Up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition.

Refer to protective measures listed in Sections 8 and 13.

### **SECTION 7. HANDLING AND STORAGE**

#### Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition. Wash hands before breaks and immediately after handling the product.

#### Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame. Keep refrigerated.

#### Specific Use(s)

Use in laboratories

# SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### **Control Parameters**

#### Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS70 General methods for sampling airborne gases and vapours

#### Exposure Controls

### Engineering Measures

Ensure adequate ventilation, especially in confined areas. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

#### Personal protective equipment

Eye Protection	Wear safety glasses with side shields (or goggles) (European standard - EN 166)
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Hand Protection

Protective gloves

Glove material Natural rubber Nitrile rubber Neoprene PVC	Breakthrough time See manufacturers recommendations	Glove thickness	EU standard EN 374	Glove comments (minimum requirement)
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Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

### 2,4,6-Trimethylstyrene

Skin and body protection	Long sleeved clothing
Respiratory Protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly
Large scale/emergency use	Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced <b>Recommended Filter type:</b> Organic gases and vapours filter Type A Brown conforming to EN14387
Small scale/Laboratory use	Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. <b>Recommended half mask:-</b> Valve filtering: EN405; or; Half mask: EN140; plus filter, EN 141 When RPE is used a face piece Fit Test should be conducted
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.
Environmental exposure controls	No information available.

# SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Physical State	Colourless - Yellow Liquid	
Odor Odor Threshold pH Melting Point/Range Softening Point Boiling Point/Range Flash Point Evaporation Rate Flammability (solid,gas) Explosion Limits	No information available No data available No information available No data available 209 °C / 408.2 °F 72 °C / 161.6 °F No data available Not applicable No data available	<b>Method -</b> CC (closed cup) Liquid
Vapor Pressure Vapor Density Specific Gravity / Density Bulk Density Water Solubility Solubility in other solvents Partition Coefficient (n-octanol/wat	,	(Air = 1.0) Liquid
Component 4-tert-Butyl catechol Autoignition Temperature Decomposition Temperature Viscosity Explosive Properties Oxidizing Properties	<b>log Pow</b> 1.98 No data available No data available No data available No information available	explosive air/vapour mixtures possible
Molecular Formula Molecular Weight	C11H14 146.23	

# SECTION 10. STABILITY AND REACTIVITY

## 2,4,6-Trimethylstyrene

Stability	Stable under normal conditions.
Hazardous Reactions Hazardous Polymerization	None under normal processing. Hazardous polymerization does not occur.
Conditions to Avoid	Incompatible products. Excess heat. Keep away from open flames, hot surfaces and sources of ignition.
Materials to avoid	Strong oxidizing agents.

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

# SECTION 11. TOXICOLOGICAL INFORMATION

## **Product Information**

### (a) acute toxicity; Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
4-tert-Butyl catechol	815 mg/kg(Rat)	1331 mg/kg(Rat)	
(b) skin corrosion/irritation;	No data available		
(c) serious eye damage/irritation;	No data available		
(d) respiratory or skin sensitization; Respiratory Skin	No data available No data available		
(e) germ cell mutagenicity;	No data available		
(f) carcinogenicity;	No data available		
	There are no known carcinoge	enic chemicals in this product	
(g) reproductive toxicity;	No data available		
(h) STOT-single exposure;	No data available		
(i) STOT-repeated exposure;	No data available		
Target Organs	No information available.		
(j) aspiration hazard;	No data available		
Symptoms / effects,both acute and delayed	No information available		
	SECTION 12 ECOLOGIC		

#### **SECTION 12. ECOLOGICAL INFORMATION**

### **Ecotoxicity effects**

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox

2,4,6-Trimethylstyrene

4-tert-Butyl catechol	LC50 = 0.12 mg/L 96h	EC50=0.48 mg/L 48h								
Persistence and Degradability	No information available									
Bioaccumulative Potential	No information availab	No information available								
Component	log Pow Bioconcentration factor (BCF)									
4-tert-Butyl catechol		98		a available						
Mobility in soil	No information availab									
Endocrine Disruptor Information		contain any known or s		isruptors						
Persistent Organic Pollutant	This product does not	contain any known or s	uspected substance							
Ozone Depletion Potential	This product does not	contain any known or s	uspected substance							
	SECTION 13 DISP	OSAL CONSIDERA								
Waste from Residues/Unused Products	Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.									
Contaminated Packaging	Dispose of this container to hazardous or special waste collection point.									
Other Information	Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains.									
	SECTION 14. TRA	NSPORT INFORMA	TION							
Road and Rail Transport	Not Regulated									
IMDG/IMO	Not regulated									
IATA_	Not regulated									
Special Precautions for User	No special precautions	·								
	SECTION 15. REGU	JLATORY INFORMA	TION							

International Inventories X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), Korea (KECL).

	The Inventory of Hazardous Chemicals (2015 Edition)		TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
2,4,6-Trimethylstyrene	-	-	Х	-	212-205-4	-	-	-	-		-	-
4-tert-Butyl catechol	-	-	X	Х	202-653-9	Х	Х	Х	Х	Х	X	KE-11368

# **National Regulations**

2,4,6-Trimethylstyrene

#### **SECTION 16. OTHER INFORMATION**

Prepared By	Health, Safety and Environmental Department
Creation Date	19-Sep-2013
Revision Date	27-Apr-2024
Revision Summary	New emergency telephone response service provider.

#### **Training Advice**

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

#### Legend

**CAS** - Chemical Abstracts Service

Substances/EU List of Notified Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

Inventorv EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

TSCA - United States Toxic Substances Control Act Section 8(b)

ENCS - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances

IARC - International Agency for Research on Cancer

NZIOC - New Zealand Inventory of Chemicals

**PNEC** - Predicted No Effect Concentration

TWA - Time Weighted Average

LD50 - Lethal Dose 50%

WEL - Workplace Exposure Limit ACGIH - American Conference of Governmental Industrial Hygienists **DNEL** - Derived No Effect Level **RPE** - Respiratory Protective Equipment LC50 - Lethal Concentration 50% **NOEC** - No Observed Effect Concentration PBT - Persistent, Bioaccumulative, Toxic

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ICAO/IATA - International Civil Aviation Organization/International Air **Transport Association** ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road **OECD** - Organisation for Economic Co-operation and Development BCF - Bioconcentration factor

Key literature references and sources for data https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Physical hazards	On basis of test data
Health Hazards	Calculation method
Environmental hazards	Calculation method

EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code MARPOL - International Convention for the Prevention of Pollution from

Ships ATE - Acute Toxicity Estimate

VOC - (Volatile Organic Compound)

#### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

# **End of Safety Data Sheet**