

SAFETY DATA SHEET

Version 6.7 Revision Date 08/05/2024 Print Date 08/06/2024

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

	Product name	:	1,2,4,5-Tetramethylbenzene	
	Product Number Brand CAS-No.	-	T19607 Aldrich 95-93-2	
1.2	Relevant identified uses of the substance or mixture and uses advised against			
	Identified uses	:	Laboratory chemicals, Synthesis of substances	
	Uses advised against	:	The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.	
1.3	Details of the supplier	of	the safety data sheet	

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Company	:	Sigma-Aldrich Inc. 3050 SPRUCE ST ST. LOUIS MO 63103 UNITED STATES
Telephone Fax		+1 314 771-5765 +1 800 325-5052
Emergency telephone		
Emergency Phone #	:	800-424-9300 CHEMTREC (USA) +1-703- 527-3887 CHEMTREC (International) 24

SECTION 2: Hazards identification

1.4

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Hours/day; 7 Days/week

Flammable solids (Category 1), H228 Short-term (acute) aquatic hazard (Category 1), H400 Long-term (chronic) aquatic hazard (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16. Aldrich - T19607

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2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal Word	Danger
Hazard Statements H228 H410	Flammable solid. Very toxic to aquatic life with long lasting effects.
Precautionary Statements P210	Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
P240	Ground/bond container and receiving equipment.
P241 P273	Use explosion-proof electrical/ ventilating/ lighting/ equipment. Avoid release to the environment.
P280	Wear protective gloves/ eye protection/ face protection.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P391	Collect spillage.
P501	Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms	:	Durene 1,2,4,5-Tetramethylbenzene
Formula Molecular weight CAS-No. EC-No.	:	C ₁₀ H ₁₄ 134.22 g/mol 95-93-2 202-465-7

Component	Classification	Concentration
1,2,4,5-tetramethylbenzene		
	Flam. Sol. 1; Aquatic Acute 1; Aquatic Chronic 1; H228, H400, H410 M-Factor - Aquatic Acute: 1 - Aquatic Chronic: 1	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

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SECTION 4: First aid measures

- 4.1 Description of first-aid measures No data available
- **4.2 Most important symptoms and effects, both acute and delayed** The most important known symptoms and effects are described in the labelling (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 No data available
- **5.2** Special hazards arising from the substance or mixture Carbon oxides Combustible.
- 5.3 Advice for firefighters No data available
- **5.4 Further information** No data available

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** For personal protection see section 8.
- 6.2 Environmental precautions No data available
- 6.3 Methods and materials for containment and cleaning up No data available
- **6.4** Reference to other sections For disposal see section 13.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** For precautions see section 2.2.
- 7.2 Conditions for safe storage, including any incompatibilities No data available
- **7.3** Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Skin protection

Full contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L

Splash contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L

Control of environmental exposure

Prevent product from entering drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

	a)	Appearance	Form: crystals
	b)	Odor	No data available
	c)	Odor Threshold	No data available
	d)	рН	No data available
	e)	Melting point/freezing point	Melting point/ range: 76 - 80 °C (169 - 176 °F) - lit.
	f)	Initial boiling point and boiling range	191 - 193 °C 376 - 379 °F
	g)	Flash point	74 °C (165 °F) - closed cup - c.c.
	h)	Evaporation rate	No data available
	i)	Flammability (solid, gas)	The substance or mixture is a flammable solid with the category 1.
	j)	Upper/lower flammability or explosive limits	No data available
	k)	Vapor pressure	No data available
	I)	Vapor density	No data available
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	m)	Density	0.838 g/mL at 25	°C (77 °F) - lit.
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Relative density No data available

- n) Water solubility No data available
- o) Partition coefficient: No data available n-octanol/water
- p) Autoignition No data available temperature
- q) Decomposition No data available temperature
- r) Viscosity No data available
- s) Explosive properties Not classified as explosive.
- t) Oxidizing properties none

9.2 Other safety information No data available

SECTION 10: Stability and reactivity

10.1 Reactivity No data available

- **10.2 Chemical stability** No data available
- **10.3 Possibility of hazardous reactions** Violent reactions possible with: Oxidizing agents
- **10.4 Conditions to avoid** No data available
- **10.5 Incompatible materials** No data available
- **10.6 Hazardous decomposition products** In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - 6,700 mg/kg Remarks: (RTECS) Inhalation: No data available Dermal: No data available

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Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

- IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

11.2 Additional Information

RTECS: DC0500000

The data available to us do not suffice to permit any industrial-toxicological assessment.

Further toxicological data:

Risk of absorption.

Other dangerous properties can not be excluded.

Further data:

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish

LC0 - Leuciscus idus (Golden orfe) - 10 mg/l - 48 h Remarks: (ECOTOX Database)

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LC50 - Leuciscus idus (Golden orfe) - 30 mg/l - 48 h Remarks: (ECOTOX Database)

LC100 - Leuciscus idus (Golden orfe) - 50 mg/l - 48 h Remarks: (ECOTOX Database)

Toxicity to daphnia EC50 - Daphnia magna (Water flea) - 0.47 mg/l - 48 h and other aquatic Remarks: (External MSDS) invertebrates

12.2 Persistence and degradability Not readily biodegradable.

12.3 Bioaccumulative potential No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment

 $\mathsf{PBT}/\mathsf{vPvB}$ assessment not available as chemical safety assessment not required/not conducted

12.6 Endocrine disrupting properties No data available

12.7 Other adverse effects

Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

No data available

SECTION 14: Transport information

DOT (US)

UN number: 1325 Class: 4.1 Packing group: II Proper shipping name: Flammable solids, organic, n.o.s. (1,2,4,5-tetramethylbenzene) Reportable Quantity (RQ): Poison Inhalation Hazard: No

IMDG

UN number: 1325 A, S-G

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Class: 4.1

Packing group: II EMS-No: F-

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Proper shipping name: FLAMMABLE SOLID, ORGANIC, N.O.S. (1,2,4,5-tetramethylbenzene) Marine pollutant : yes

ΙΑΤΑ

UN number: 1325 Class: 4.1 Packing group: II Proper shipping name: Flammable solid, organic, n.o.s. (1,2,4,5-tetramethylbenzene)

SECTION 15: Regulatory information

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards	Fire Hazard	
SARA 313	This material does not contain any chemical components with known CAS numbers that ext threshold (De Minimis) reporting levels established SARA Title III, Section 313.	

US State Regulations

Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Maine Chemicals of High Concern

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

Product does not contain any listed chemicals

Washington Chemicals of High Concern

Product does not contain any listed chemicals

The ingredients of this product are reported in the following inventories:

TSCA : All substances listed as active on the TSCA inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

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SECTION 16: Other information

The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the product ordered. For further information please contact mlsbranding@sial.com. Version: 6.7 Revision Date: 08/05/2024 Print Date: 08/06/2024

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