

SAFETY DATA SHEET

Creation Date 14-May-2010 Revision Date 27-March-2024 Revision Number 3

1. Identification

Product Name Trimethylhydroquinone

Cat No. : L14722

CAS-No 700-13-0

Synonyms No information available

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Importer/Distributor

Fisher Scientific 112 Colonnade Road, Ottawa, ON K2E 7L6,

Canada

Tel: 1-800-234-7437

Emergency Telephone Number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

2. Hazard(s) identification

Classification

WHMIS 2015 Classification Classified as hazardous under the Hazardous Products Regulations (SOR/2015-17)

Acute dermal toxicity
Category 2
Acute Inhalation Toxicity
Category 4
Skin Corrosion/Irritation
Category 2
Serious Eye Damage/Eye Irritation
Category 1
Skin Sensitization
Category 1
Specific target organ toxicity (single exposure)
Category 3

Target Organs - Respiratory system.

Label Elements

Signal Word

Danger

Hazard Statements

Fatal in contact with skin
Harmful if inhaled
Causes skin irritation
May cause an allergic skin reaction
Causes serious eye damage
May cause respiratory irritation



Precautionary Statements

Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray

Do not get in eyes, on skin, or on clothing

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves/protective clothing/eye protection/face protection

Response

IF ON SKIN: Wash with plenty of soap and water

IF INHALED: Remove person to fresh air and keep comfortable for breathing

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER/doctor

Take off immediately all contaminated clothing and wash it before reuse

Storage

Store locked up

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

Disposa

Dispose of contents/container to an approved waste disposal plant

Other Hazards

Very toxic to aquatic life with long lasting effects

3. Composition/Information on Ingredients

Component		CAS-No	Weight %		
	1,4-Benzenediol, 2,3,5-trimethyl-	700-13-0	>95		

4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

Skin ContactWash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Get medical attention.

Inhalation Remove from exposure, lie down. Remove to fresh air. If breathing is difficult, give oxygen.

If not breathing, give artificial respiration. Get medical attention.

Ingestion Clean mouth with water. Get medical attention.

Most important symptoms/effects
Causes eye burns. May cause allergic skin reaction. . Symptoms of allergic reaction may

include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness,

lightheadedness, chest pain, muscle pain or flushing

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Water spray. Carbon dioxide (CO₂). Dry chemical. Chemical foam.

Unsuitable Extinguishing Media No information available

Flash Point 191 °C / 375.8 °F

Method - CC (closed cup)

Autoignition Temperature

Explosion Limits

No information available

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Do not allow run-off from fire-fighting to enter drains or water courses.

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO2).

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.

NFPA

Health	Flammability	Instability	Physical hazards
4	1	0	N/A

6. Accidental release measures

Personal Precautions Avoid dust formation. Use personal protective equipment as required. Ensure adequate

ventilation.

Environmental PrecautionsDo not flush into surface water or sanitary sewer system. Do not allow material to

contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. See Section 12 for additional

Ecological Information. Avoid release to the environment. Collect spillage.

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal. **Up**

7. Handling and storage
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Handling Avoid contact with skin and eyes. Do not breathe dust.

Storage. Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Incompatible

Materials. Strong oxidizing agents.

8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure

limitsestablished by the region specific regulatory bodies.

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations

and safety showers are close to the workstation location.

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 ProtectionGogglesHand ProtectionProtective gloves

Γ	Glove material	Breakthrough time	Glove thickness	Glove comments
١	Nitrile rubber	See manufacturers	-	Splash protection only
1	Neoprene	recommendations		Opiash protection only
1	Natural rubber	recommendations		
1	PVC			

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) 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, gloves with care avoiding skin contamination.

Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly **Recommended Filter type:** Particulates filter conforming to EN 143

When RPE is used a face piece Fit Test should be conducted

Environmental exposure controls

Prevent product from entering drains. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

9. Physical and chemical properties

Physical State Powder Solid Appearance Beige Odor Odorless

Odor Threshold

Ph

No information available

No information available

No information available

 Melting Point/Range
 169 - 174 °C / 336.2 - 345.2 °F

 Boiling Point/Range
 295 °C / 563 °F @ 760 mmHg

 Flash Point
 191 °C / 375.8 °F

Method - CC (closed cup)

Evaporation Rate Not applicable
Flammability (solid.gas) No information available

Flammability (solid,gas)

No information available
Flammability or explosive limits

Upper No data available
Lower No data available
Vapor Pressure 0.001 kPa @ 20 °C

Vapor Density
Not applicable
Specific Gravity
No information available

Solubility Soluble in water

Trimethylhydroquinone

Partition coefficient: n-octanol/water

Autoignition Temperature Decomposition Temperature

Viscosity Molecular Formula **Molecular Weight**

No data available No information available No information available

Not applicable C9 H12 O2 152.19

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stable under recommended storage conditions. Stability

Conditions to Avoid Incompatible products. **Incompatible Materials** Strong oxidizing agents

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2)

Hazardous Polymerization No information available.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
1,4-Benzenediol, 2,3,5-trimethyl-	LD50 = 3200 mg/kg (Rat)	>200 mg/kg (Rabbit)	LC50 = 1.2 mg/L (Rat) 2 h
			LC50 = 1.7 mg/L (Rat) 2 h

Toxicologically Synergistic

Products

No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available

Sensitization May cause sensitization by skin contact

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
1,4-Benzenediol,	700-13-0	Not listed				
2 3 5-trimethyl-						

Mutagenic Effects No information available

No information available. **Reproductive Effects**

No information available. **Developmental Effects**

No information available. **Teratogenicity**

STOT - single exposure Respiratory system STOT - repeated exposure None known

Aspiration hazard No information available

delayed

Symptoms / effects, both acute and Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

Endocrine Disruptor Information No information available

Other Adverse Effects See actual entry in RTECS for complete information.

12. Ecological information

Ecotoxicity

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
1,4-Benzenediol, 2,3,5-trimethyl-	EC50: = 15.1 mg/L, 96h (Desmodesmus subspicatus) EC50: = 13 mg/L, 72h (Desmodesmus subspicatus)	Not listed	EC50 = 4.07 mg/L 17 h	EC50: = 0.97 mg/L, 48h (Daphnia magna)

Persistence and Degradability

Soluble in water Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation

No information available.

Mobility

. Will likely be mobile in the environment due to its water solubility.

Component	log Pow
1,4-Benzenediol, 2,3,5-trimethyl-	3.32

13. Disposal considerations

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT

UN-No UN3077

Proper Shipping Name Environmentally hazardous substances, solid, n.o.s.

Technical Name 1,4-Benzenediol, 2,3,5-trimethyl-

Hazard Class 9
Packing Group III

TDG

UN-No UN3077

Proper Shipping Name Environmentally hazardous substances, solid, n.o.s.

Hazard Class 9
Packing Group III

<u>IATA</u>

UN-No UN3077

Proper Shipping Name Environmentally hazardous substances, solid, n.o.s.

Hazard Class 9
Packing Group III

IMDG/IMO

UN-No UN3077

Proper Shipping Name Environmentally hazardous substances, solid, n.o.s.

Hazard Class 9
Packing Group III

15. Regulatory information

International Inventories

Component	CAS-No	DSL	NDSL	TSCA	TSCA Inventory	EINECS	ELINCS	NLP

Trimethylhydroquinone

					notification - Active-Inactive			
1,4-Benzenediol, 2,3,5-trimethyl-	700-13-0	-	X	X	ACTIVE	211-838-3	ı	1

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
1,4-Benzenediol, 2,3,5-trimethyl-	700-13-0	Х	-	Х	X	X	X	X	X

Legend:

X - Listed '-' - Not Listed

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

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

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

ENCS - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

Canada

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

Other International Regulations

Authorisation/Restrictions according to EU REACH

Component	- (REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	
1,4-Benzenediol, 2,3,5-trimethyl-	-	Use restricted. See item 75. (see link for restriction details)	-

REACH links

https://echa.europa.eu/substances-restricted-under-reach

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

Component	CAS-No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
1,4-Benzenediol, 2,3,5-trimethyl-	700-13-0	Listed	Not applicable	Not applicable	Not applicable
Component	CAS-No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
1,4-Benzenediol, 2,3,5-trimethyl-	700-13-0	Not applicable	Not applicable	Not applicable	Not applicable

16. Other information

Prepared By Product Safety Department

Email: chem.techinfo@thermofisher.com

www.thermofisher.com

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Trimethylhydroquinone

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Revision Summary New emergency telephone response service provider.

Disclaimer

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End of SDS