

1 Identification of substance**Product details**

Trade name

Trimethylhydroquinone

Stock number:

B22819, L14722

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG
Benzstrasse 3
D-76185 Karlsruhe / GermanyE-mail: gcat@matthey.com
www.alfa-chemcat.com

Informing department:

Product safety department.

Emergency information:

Giftnotruf Universität Mainz / Poison Information Center Mainz
www.giftinfo.uni-mainz.de Telefon:+49(0)6131/19240**2 Hazards identification**

Hazard designation:



 Xn Harmful
N Dangerous for the environment

Information pertaining to particular dangers for man and environment

 R 20 Harmful by inhalation.
 R 37/38 Irritating to respiratory system and skin.
 R 43 May cause sensitisation by skin contact.
 R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

GHS label elements


Danger

H311 - Toxic in contact with skin.


Warning

 H400 - Very toxic to aquatic life.
 H410 - Very toxic to aquatic life with long lasting effects.
Warning
 H315 - Causes skin irritation.
 H317 - May cause an allergic skin reaction.
 H335 - May cause respiratory irritation.
 P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.
 P321 Specific treatment (see on this label).
 P361 Remove/Take off immediately all contaminated clothing.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Prevention:

Response:

Storage:

Disposal:

3 Composition/information on ingredients

Chemical characterization:

Trimethylhydroquinone (CAS# 700-13-0): 100%

Designation: (CAS#)

Identification number(s):

211-838-3

EINECS Number:

604-045-00-2

Index number:

4 First aid measures

After inhalation

Supply fresh air and call for doctor for safety reasons. Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

After skin contact

Seek immediate medical advice. Instantly wash with water and soap and rinse thoroughly.

After eye contact

Seek immediate medical advice.

After swallowing

Rinse opened eye for several minutes under running water. Then consult doctor. Seek immediate medical advice.

5 Fire fighting measures

Suitable extinguishing agents

CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

Special hazards caused by the material, its products of combustion or flue gases:

 Can be released in case of fire:
 Carbon monoxide and carbon dioxide
 Wear self-contained breathing apparatus.
 Wear full protective suit.

Protective equipment:

6 Accidental release measures

Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation

Measures for environmental protection:

Do not allow material to be released to the environment without proper governmental permits.

Measures for cleaning/collecting:

Dispose of contaminated material as waste according to item 13. Ensure adequate ventilation.

Additional information:

 See Section 7 for information on safe handling
 See section 8 for information on personal protection equipment.
 See Section 13 for information on disposal.
7 Handling and storage

Handling

Information for safe handling:

 Keep containers tightly sealed.
 Store in cool, dry place in tightly closed containers.
 Ensure good ventilation/exhaustion at the workplace.

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Storage

Requirements to be met by storerooms and containers:

No special requirements.

Information about storage in one common storage facility:

Store away from oxidizing agents.

Further information about storage conditions:

 Keep container tightly sealed.
 Store in cool, dry conditions in well sealed containers.

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8 Exposure controls and personal protection

Additional information about design of technical systems:	Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.
Components with critical values that require monitoring at the workplace:	Not required.
Additional information:	No data
Personal protective equipment	The usual precautionary measures should be adhered to in handling the chemicals. Keep away from foodstuffs, beverages and food. Instantly remove any soiled and impregnated garments. Wash hands during breaks and at the end of the work. Avoid contact with the skin. Avoid contact with the eyes and skin. Use breathing protection with high concentrations. Check protective gloves prior to each use for their proper condition. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
General protective and hygienic measures	
Breathing equipment:	
Protection of hands:	
Material of gloves	
Eye protection:	Safety glasses Face protection
Body protection:	Protective work clothing.

9 Physical and chemical properties:**General Information**

Form:	Powder
Colour:	White Cream coloured
Smell:	Not determined

Change in condition	
Melting point/Melting range:	169-172°C
Boiling point/Boiling range:	Not determined
Sublimation temperature / start:	Not determined

Flash point:	140°C
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Ignition temperature:	Not determined
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Decomposition temperature:	Not determined
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Danger of explosion:	Product is not explosive.
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Critical values for explosion:	
Lower:	Not determined
Upper:	Not determined

Steam pressure:	Not determined
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Density	Not determined
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10 Stability and reactivity

Thermal decomposition / conditions to be avoided:	No decomposition if used and stored according to specifications.
Materials to be avoided:	Oxidizing agents
Dangerous reactions:	No dangerous reactions known
Dangerous products of decomposition:	Carbon monoxide and carbon dioxide

11 Toxicological information**Acute toxicity:****LD/LC50 values that are relevant for classification:**

Oral	LD50	3200 mg/kg (rat)
Dermal	LD50	>200 mg/kg (rabbit)
Inhalative	LC50/4H	1500 mg/m ³ /4H (rat)

Primary irritant effect:	Irritant for skin and mucous membranes. Irritant effect. Sensitization possible by skin contact. To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. May cause sensitisation by skin contact.
on the skin:	
on the eye:	
Sensitization:	
Additional toxicological information:	
Sensitisation	

12 Ecological information:

Ecotoxicological effects:	Very toxic for fish Do not allow product to reach ground water, water bodies or sewage system. Water hazard class 2 (Self-assessment): hazardous for water. Danger to drinking water if even small quantities leak into soil. Also poisonous for fish and plankton in water bodies. Do not allow material to be released to the environment without proper governmental permits. Very toxic for aquatic organisms
Remark:	
Additional ecological information:	
General notes:	

13 Disposal considerations

Product:	Consult state, local or national regulations for proper disposal. Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations.
Recommendation	
Uncleaned packagings:	
Recommendation:	Disposal must be made according to official regulations.

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14 Transport information

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)



ADR/RID-GGVS/E Class: 9 (M7) Miscellaneous dangerous substances and articles.
 Kemler Number: 90
 UN-Number: 3077
 Packaging group: III
 Label: 9
 Special marking: Symbol (fish and tree)
 Designation of goods: 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Trimethylhydroquinone)
 Limited quantities (LQ): 27
 Transport category: 3
 Tunnel restriction code: E

Maritime transport IMDG/GGVSea:



IMDG/GGVSea Class: 9
 UN Number: 3077
 Label: 9
 Packaging group: III
 Marine pollutant: No
 Correct technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Trimethylhydroquinone)

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: 9
 UN/ID Number: 3077
 Label: 9
 Special marking: Symbol (fish and tree)
 Packaging group: III
 Correct technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Trimethylhydroquinone)

UN "Model Regulation":

UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III

15 Regulatory information

Designation according to EC guidelines:

Code letter and hazard designation of product:



Xn Harmful
 N Dangerous for the environment

Risk phrases:

20 Harmful by inhalation.
 37/38 Irritating to respiratory system and skin.
 43 May cause sensitisation by skin contact.
 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

24 Avoid contact with skin.
 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 37/39 Wear suitable gloves and eye/face protection.
 60 This material and its container must be disposed of as hazardous waste.
 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

National regulations

Information about limitation of use:

Employment restrictions concerning young persons must be observed.
 For use only by technically qualified individuals.

Water hazard class:

Water hazard class 2 (Self-assessment): hazardous for water.

16 Other information:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing data specification sheet: Health, Safety and Environmental Department.

Contact: Zachariah Holt

Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association
 IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent