

Safety Data Sheet
according to 1907/2006/EC, Article 31

Revision: 13.07.2010

Printing date 13.07.2010

1 Identification of substance**Product details**

Trade name

Methylmercury(II) chloride, standard solution in water, Methylmercury(II) chloride 1000 ppm

Stock number:

33553

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG
Benzstrasse 3
D-76185 Karlsruhe / GermanyE-mail: gcat@matthey.com
www.alfa-chemcat.comInforming department:
Emergency information:Product safety department.
Giftnotruf Universität Mainz / Poison Information Center Mainz
www.giftinfo.uni-mainz.de Telefon:+49(0)6131/19240**2 Hazards identification**

Hazard designation:



 T+ Very toxic
N Dangerous for the environment

Information pertaining to particular dangers for man and environment

 R 26/27/28 Very toxic by inhalation, in contact with skin and if swallowed.
 R 33 Danger of cumulative effects.
 R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

GHS label elements

 **Danger**

 H300 - Fatal if swallowed.
 H310 - Fatal in contact with skin.
 H330 - Fatal if inhaled.

 **Warning**

H373 - May cause damage to organs through prolonged or repeated exposure.

 **Warning**

 H400 - Very toxic to aquatic life.
 H410 - Very toxic to aquatic life with long lasting effects.
 P260 Do not breathe dust/fume/gas/mist/vapours/spray.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 P320 Specific treatment is urgent (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:
Designation: (CAS#)Methylmercury(II) chloride (CAS# 115-09-3), 0.10%
Water (CAS# 7732-18-5), 99.9%Identification number(s):
EINECS Number:
Index number:204-064-2
080-004-00-7**4 First aid measures**

After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. Seek immediate medical advice.

After skin contact

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

After eye contact

Rinse opened eye for several minutes under running water. Then consult doctor.

After swallowing

Seek immediate medical advice.

5 Fire fighting measuresSuitable extinguishing agents
Special hazards caused by the material, its products of combustion or flue gases:

Use fire fighting measures that suit the environment.

Protective equipment:

Can be released in case of fire:
Toxic metal oxide smoke
Wear self-contained breathing apparatus.
Wear full protective suit.**6 Accidental release measures**

Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away.

Measures for environmental protection:
Measures for cleaning/collecting:Ensure adequate ventilation
Do not allow material to be released to the environment without proper governmental permits.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
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:

The product is not flammable

Storage
Requirements to be met by storerooms and containers:

No special requirements.

Information about storage in one common storage facility:

Do not store together with acids.

Further information about storage conditions:

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

GB

(Contd. on page 2)

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(Contd. of page 1)

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:

methyl mercury, as Hg
mg/m³

ACGIH TLV	0.01; 0.03-STEL (skin)
Austria MAK	0.05
Belgium TWA	0.01 (skin)
Denmark TWA	0.05 (skin)
Finland TWA	0.05 (skin)
France VME	0.05 (skin)
Germany MAK	0.01
Japan OEL	0.05
Korea TLV	0.01; 0.03-STEL (skin)
Netherlands MAC-TGG	0.05
Norway TWA	0.05
Sweden NGV	0.05 (vapor)
United Kingdom TWA	0.025
USA PEL	0.01 (skin)

Additional information:

No data

Personal protective equipment**General protective and hygienic measures**

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 eyes and skin.
Use breathing protection with high concentrations.

Breathing equipment:**Eye protection:****Body protection:**

Safety glasses
Protective work clothing.

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

Form: Liquid
Colour: Clear
Smell: Not determined

Change in condition

Melting point/Melting range: Not determined
Boiling point/Boiling range: Not determined
Sublimation temperature / start: Not determined

Flash point:

Not applicable
Not determined

Ignition temperature:

Not determined

Decomposition temperature:

Not determined

Danger of explosion:

Product is not explosive.

Critical values for explosion:

Lower: Not determined
Upper: Not determined

Steam pressure:

Not determined

Density

Not determined

Solubility in / Miscibility with Water:

Fully miscible

10 Stability and reactivity**Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

Materials to be avoided:

Acids
Aqueous solutions are incompatible with alkali and alkaline earth metals and many reactive organic and inorganic chemicals.

Dangerous reactions:

Reacts with alkaline metals
Reacts with alkaline earth metals

Dangerous products of decomposition:

Carbon monoxide
Hydrogen chloride (HCl)
Toxic metal oxide smoke
Mercury and organic compounds containing mercury

11 Toxicological information**Acute toxicity:****Primary irritant effect:****on the skin:****on the eye:****Sensitization:****Other information (about experimental toxicology):**

Irritant for skin and mucous membranes.
Irritant effect.
No sensitizing effect known.

Additional toxicological information:

Mutagenic effects have been observed on tests with laboratory animals.
Mutagenic effects have been observed on tests with bacteria.
Reproductive effects have been observed on tests with laboratory animals.
Tumorigenic effects have been observed on tests with laboratory animals.
Carcinogenic effects have been observed on tests with laboratory animals.
Danger by skin resorption.
To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
IARC-2B: Possibly carcinogenic to humans: limited evidence in humans in the absence of sufficient evidence in experimental animals.
The Registry of Toxic Effects of Chemical Substances (RTECS) contains tumorigenic and/or carcinogenic and/or neoplastic data for this product.

GB

(Contd. on page 3)

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(Contd. of page 2)

12 Ecological information:

Ecotoxicological effects:
Remark: Very toxic for fish
Additional ecological information:
General notes: Water danger class 3 (Self-assessment): extremely hazardous for water. Do not allow product to reach ground water, water bodies or sewage system, even in small quantities. Danger to drinking water if even extremely 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

13 Disposal considerations

Product:
Recommendation 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.

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.
Recommended cleaning agent: Water, if necessary with cleaning agent.

14 Transport information**Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)**

ADR/RID-GGVS/E Class: 6.1 (T4) Toxic substances.
Kemler Number: 60
UN-Number: 2024
Packaging group: II
Label: 6.1
Special marking: Symbol (fish and tree)
Designation of goods: 2024 MERCURY COMPOUND, LIQUID, N.O.S. (methylmercury(II) chloride solution)
Limited quantities (LQ) LQ17
Transport category: 2
Tunnel restriction code: D/E

Maritime transport IMDG/GGVSea:

IMDG/GGVSea Class: 6.1
UN Number: 2024
Label: 6.1
Packaging group: II
Marine pollutant: No
Segregation groups: Heavy metals and their salts (including their organometallic compounds), mercury and mercury compounds
Correct technical name: MERCURY COMPOUND, LIQUID, N.O.S. (methylmercury(II) chloride solution)

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: 6.1
UN/ID Number: 2024
Label: 6.1
Packaging group: II
Correct technical name: MERCURY COMPOUND, LIQUID, N.O.S. (methylmercury(II) chloride solution)

UN "Model Regulation":

Environmental hazards: UN2024, MERCURY COMPOUND, LIQUID, N.O.S., 6.1, II
Environmentally hazardous substance, liquid; Marine Pollutant

15 Regulatory information**Designation according to EC guidelines:**

Code letter and hazard designation of product:



T+ Very toxic
N Dangerous for the environment

Risk phrases:

26/27/28 Very toxic by inhalation, in contact with skin and if swallowed.
33 Danger of cumulative effects.
50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

13 Keep away from food, drink and animal feedingstuffs.
28 After contact with skin, wash immediately with plenty of water.
36 Wear suitable protective clothing.
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
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:**

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

Water hazard class:

Water danger class 3 (Self-assessment): extremely 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

(Contd. on page 4)
GB

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Abbreviations and acronyms:

(Contd. of page 3)

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)

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