

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 22.08.2010

Revision: 22.08.2010

1 Identification of substance

Product details

Trade name

Methylhydrazine sulfate

Stock number:

L10122

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:



T Toxic

Information pertaining to particular dangers for man and environment

R 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
R 40 Limited evidence of a carcinogenic effect.

GHS label elements

**Danger**H301 - Toxic if swallowed.
H311 - Toxic in contact with skin.
H330 - Fatal if inhaled.**Warning**H351 - Suspected of causing cancer.
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:

Methylhydrazine sulfate (CAS# 302-15-8): 100%

Designation: (CAS#)

Identification number(s):

206-115-4

EINECS Number:

4 First aid measures

General information

Instantly remove any clothing soiled by the product.
Remove breathing apparatus only after soiled clothing has been completely removed.
In case of irregular breathing or respiratory arrest provide artificial respiration.
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
Seek immediate medical advice.
Instantly wash with water and soap and rinse thoroughly.
Seek immediate medical advice.
Rinse opened eye for several minutes under running water. Then consult doctor.
Do not induce vomiting; instantly call for medical help.
Seek immediate medical advice.

After inhalation

After skin contact

After eye contact

After swallowing

5 Fire fighting measures

Suitable extinguishing agents
Special hazards caused by the material, its products of combustion or flue gases:CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

Protective equipment:

Can be released in case of fire:
Carbon monoxide and carbon dioxide
Nitrogen oxides (NO_x)
Sulphur oxides (SO_x)
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:

Ensure adequate ventilation

Measures for cleaning/collecting:

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

Additional information:

Dispose of contaminated material as waste according to item 13.
Ensure adequate ventilation.
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.
Open and handle container with care.

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.
Store in a locked cabinet or with access restricted to technical experts or their assistants.

GB

(Contd. on page 2)

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 22.08.2010

Revision: 22.08.2010

Trade name **Methylhydrazine sulfate**

(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:	Not required.
Additional information:	No data
Personal protective equipment	The usual precautionary measures should be adhered to in handling the chemicals.
General protective and hygienic measures	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. Store protective clothing separately. 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. Impervious gloves
Breathing equipment:	Not determined
Protection of hands:	Safety glasses
Material of gloves	Protective work clothing.
Penetration time of glove material	
Eye protection:	
Body protection:	

9 Physical and chemical properties:

General Information	
Form:	Crystalline powder
Colour:	White
Smell:	Not determined
Change in condition	
Melting point/Melting range:	141-143°C
Boiling point/Boiling range:	Not determined
Sublimation temperature / start:	Not determined
Flash point:	Not applicable
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:	Soluble

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 Nitrogen oxides (NO _x) Sulphur oxides (SO _x)

11 Toxicological information

Acute toxicity:	
Primary irritant effect:	
on the skin:	May cause irritation
on the eye:	May cause irritation
Sensitization:	No sensitizing effect known.
Other information (about experimental toxicology):	Tumorigenic effects have been observed on tests with laboratory animals. Mutagenic effects have been observed on tests with laboratory animals. To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. Danger by skin resorption.
Additional toxicological information:	No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

12 Ecological information:

Additional ecological information:	
General notes:	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. Do not allow material to be released to the environment without proper governmental permits.

13 Disposal considerations

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

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 22.08.2010

Revision: 22.08.2010

Trade name **Methylhydrazine sulfate**

(Contd. of page 2)

14 Transport information

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



ADR/RID-GGVS/E Class: 6.1 (T2) Toxic substances.
 Kemler Number: 60
 UN-Number: 2811
 Packaging group: III
 Label: 6.1
 Designation of goods: 2811 TOXIC SOLID, ORGANIC, N.O.S. (Methylhydrazine sulfate)
 Limited quantities (LQ): LQ9

Maritime transport IMDG/GGVSea:



IMDG/GGVSea Class: 6.1
 UN Number: 2811
 Label: 6.1
 Packaging group: III
 Marine pollutant: No
 Correct technical name: TOXIC SOLID, ORGANIC, N.O.S. (Methylhydrazine sulfate)

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: 6.1
 UN/ID Number: 2811
 Label: 6.1
 Packaging group: III
 Correct technical name: TOXIC SOLID, ORGANIC, N.O.S. (Methylhydrazine sulfate)

UN "Model Regulation":

UN2811, TOXIC SOLID, ORGANIC, N.O.S., 6.1, III

15 Regulatory information

Designation according to EC guidelines:

Code letter and hazard designation of product:



T Toxic

Risk phrases:

23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
 40 Limited evidence of a carcinogenic effect.

Safety phrases:

27 Take off immediately all contaminated clothing.
 36/37 Wear suitable protective clothing and gloves.
 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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)