

Safety data sheet

according to 1907/2006/EC, Article 31

Revision: 05.11.2008

Printing date 01.07.2013

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

Trade name

Chloroiodomethane

Stock number:

A11032, L01243

CAS Number:

593-71-5

EC number:

209-804-8

1.2 Relevant identified uses of the substance or mixture and uses advised against.

Identified use:

SU24 Scientific research and development

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG
 A Johnson Matthey Company
 Zeppelinstr. 7b
 76185 Karlsruhe / Germany
 Tel: +49 (0) 721 84007 280
 Fax: +49 (0) 721 84007 300
 Email: tech@alfa.com
 www.alfa.com
 Product safety Tel + +049 (0) 7275 988687-0
 Carechem 24: +44 (0) 1235 239 670 (Multi-language emergency number)
 Poison Information Center Mainz
 www.giftinfo.uni-mainz.de Telephone: +49(0)6131/19240

Informing department:

1.4 Emergency telephone number:

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H312 Harmful in contact with skin.

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC☒ Xn; Harmful

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

☒ Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.

Information concerning particular hazards

for human and environment:

Not applicable

Other hazards that do not result in

classification

No information known.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms

Signal word

Hazard statements

The substance is classified and labelled according to the CLP regulation.

GHS07

Warning

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H332 Harmful if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

P261

Avoid breathing dust/fume/gas/mist/vapours/spray.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P321

Specific treatment (see on this label).

P405

Store locked up.

P501

Dispose of contents/container in accordance with local/regional/national/international

regulations.

Precautionary statements**2.3 Other hazards**

Results of PBT and vPvB assessment

PBT:

Not applicable.

vPvB:

Not applicable.

SECTION 3: Composition/information on ingredients**3.1 Substances**

CAS# Designation:

593-71-5 Chloroiodomethane

Identification number(s):

209-804-8

EC number:

Copper (CAS# 7440-50-8)

Impurities and stabilising additives:

SECTION 4: First aid measures**4.1 Description of 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.

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.

Seek medical treatment.

After skin contact

After eye contact

After swallowing

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

Suitable extinguishing agents

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

5.2 Special hazards arising from the substance or mixture

If this product is involved in a fire, the following can be released:
 Carbon monoxide and carbon dioxide

(Contd. on page 2)
DE/E

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 01.07.2013

Revision: 05.11.2008

Trade name **Chloriodomethane**

(Contd. of page 1)

5.3 Advice for firefighters
Protective equipment:

 Hydrogen chloride (HCl)
 Hydrogen iodide (HI)

 Wear self-contained breathing apparatus.
 Wear full protective suit.
SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**
 Wear protective equipment. Keep unprotected persons away.
 Ensure adequate ventilation.
6.2 Environmental precautions:
 Do not allow material to be released to the environment without proper governmental permits.
 Do not allow product to reach sewage system or water bodies.
 Do not allow to enter the ground/soil.
6.3 Methods and material for containment and cleaning up:
 Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
 Dispose of contaminated material as waste according to item 13.
Prevention of secondary hazards:**6.4 Reference to other sections**
 Ensure adequate ventilation.
 No special measures required.
 See Section 7 for information on safe handling
 See section 8 for information on personal protection equipment.
 See Section 13 for information on disposal.
SECTION 7: Handling and storage**7.1 Precautions 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:

No information known.

7.2 Conditions for safe storage, including any incompatibilities
Storage
Requirements to be met by storerooms and containers:
Information about storage in one common storage facility:

No special requirements.

Further information about storage conditions:
 Store away from oxidizing agents.
 Store in the dark.
7.3 Specific end use(s)
 Keep container tightly sealed.
 Store in cool, dry conditions in well sealed containers.
 Protect from the effects of light.
 No further relevant information available.
SECTION 8: Exposure controls/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.

8.1 Control parameters**Components with critical values that require monitoring at the workplace:****Additional information:**
 Not required.
 No data
8.2 Exposure controls**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.
 Do not inhale gases / fumes / aerosols.
 Avoid contact with the eyes and skin.
 Maintain an ergonomically appropriate working environment.
 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.
Breathing equipment:**Protection of hands:****Material of gloves****Penetration time of glove material****Eye protection:****Body protection:**
 Impervious gloves
 Not determined
 Safety glasses
 Face protection
 Protective work clothing.
SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties****General Information****Appearance:**
 Form: Liquid
 Colour: Colourless
 Smell: Not determined
 Odour threshold: Not determined.

pH-value: Not determined.

Change in condition

Melting point/Melting range: Not determined

Boiling point/Boiling range: 108-109 °C

Sublimation temperature / start: Not determined

Flash point: Not determined

Inflammability (solid, gaseous): Not determined.

Ignition temperature: Not determined

Decomposition temperature: Not determined

Self-inflammability: Not determined.

Danger of explosion: Product is not explosive.

Critical values for explosion:

Lower: Not determined

Upper: Not determined

Steam pressure: Not determined

(Contd. on page 3)
DE/E

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 01.07.2013

Revision: 05.11.2008

Trade name **Chloriodomethane**

(Contd. of page 2)

Density at 20 °C	2,42 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with Water:	Not miscible or difficult to mix
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.
9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity	No information known.
10.2 Chemical stability	Stable under recommended storage conditions.
Thermal decomposition / conditions to be avoided:	No decomposition if used and stored according to specifications.
10.3 Possibility of hazardous reactions	No dangerous reactions known
10.5 Incompatible materials:	Alkali metals Bases Oxidizing agents Light
10.6 Hazardous decomposition products:	Carbon monoxide and carbon dioxide Hydrogen chloride (HCl) Hydrogen iodide (HI)

SECTION 11: Toxicological information

11.1 Information on toxicological effects	
Acute toxicity:	Harmful if inhaled. Harmful in contact with skin. Harmful if swallowed. Danger by skin resorption.
LD/LC50 values that are relevant for classification:	No data
Skin irritation or corrosion:	Causes skin irritation.
Eye irritation or corrosion:	Causes serious eye irritation.
Sensitization:	No sensitizing effect known.
Germ cell mutagenicity:	No effects known.
Carcinogenicity:	No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.
Reproductive toxicity:	No effects known.
Specific target organ system toxicity - repeated exposure:	No effects known.
Specific target organ system toxicity - single exposure:	May cause respiratory irritation.
Aspiration hazard:	No effects known.
Additional toxicological information:	To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.


SECTION 12: Ecological information

12.1 Toxicity	
Aquatic toxicity:	No further relevant information available.
12.2 Persistence and degradability	No further relevant information available.
12.3 Bioaccumulative potential	No further relevant information available.
12.4 Mobility in soil	No further relevant information available.
Additional ecological information:	
General notes:	Do not allow material to be released to the environment without proper governmental permits. Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system. Avoid transfer into the environment.
12.5 Results of PBT and vPvB assessment	
PBT:	Not applicable.
vPvB:	Not applicable.
12.6 Other adverse effects	No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods	
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.

SECTION 14: Transport information

UN-Number	
ADR, IMDG, IATA	UN2810
14.2 UN proper shipping name	
ADR	2810 TOXIC LIQUID, ORGANIC, N.O.S. (Chloriodomethane)
IMDG, IATA	TOXIC LIQUID, ORGANIC, N.O.S. (Chloriodomethane)
14.3 Transport hazard class(es)	
ADR	
	
Class	6.1 (T1) Toxic substances.
Label	6.1

(Contd. on page 4)
DE/E

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 01.07.2013

Revision: 05.11.2008

Trade name **Chloriodomethane**

(Contd. of page 3)

IMDG, IATA

Class
Label6.1 Toxic substances.
6.1Packing group
ADR, IMDG, IATA

III

14.5 Environmental hazards:

Not applicable.

14.6 Special precautions for user
Kemler Number:Warning: Toxic substances.
6014.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC
Code

Not applicable.

Transport/Additional information:

ADR

Excepted quantities (EQ):
Limited quantities (LQ)E1
5LTransport category
Tunnel restriction code2
E

UN "Model Regulation":

UN2810, TOXIC LIQUID, ORGANIC, N.O.S. (Chloriodomethane), 6.1, III

SECTION 15: Regulatory information

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

Australian Inventory of Chemical

Substances

Substance is not listed.

Standard for the Uniform Scheduling of

Drugs and Poisons

Substance is not listed.

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 hazard class 1 (Self-assessment): slightly hazardous for water.

Other regulations, limitations and prohibitive

regulations

ELINCS (European List of Notified Chemical

Substances)

Substance is not listed.

Substances of very high concern (SVHC)

according to REACH, Article 57

Substance is not listed.

REACH - Pre-registered substances

Substance is listed.

15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

SECTION 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.

Abbreviations and acronyms:

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

DE/E