

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 13.07.2010

Revision: 13.07.2010

1 Identification of substance

Product details

Trade name

Copper (I) phenylacetylide

Stock number:

17538

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:

C Corrosive
F Highly flammable

Information pertaining to particular dangers for man and environment

R 15 Contact with water liberates extremely flammable gases.
R 17 Spontaneously flammable in air.
R 34 Causes burns.

GHS label elements

**Danger**H250 - Catches fire spontaneously if exposed to air.
H251 - Self-heating; may catch fire.
H260 - In contact with water releases flammable gases which may ignite spontaneously.**Danger**H314 - Causes severe skin burns and eye damage.
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Prevention:

Response:

Storage:

P405 Store locked up.

Disposal:

P422 Store contents under inert gas.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition/information on ingredients

Chemical characterization:

Designation: (CAS#)

Copper (I) phenylacetylide (CAS# 13146-23-1)

4 First aid measures

General information

After inhalation

Instantly remove any clothing soiled by the product.
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.

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

For safety reasons unsuitable extinguishing agents

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

Extinguishing powder. Do not use water.

Water.

Reacts violently with water
Contact with water releases flammable gases
Can be released in case of fire:
Carbon monoxide and carbon dioxide
Metal oxide
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.

Measures for environmental protection:

Measures for cleaning/collecting:

Ensure adequate ventilation
Keep away from ignition sources
Do not allow material to be released to the environment without proper governmental permits.
Use neutralizing agent.
Dispose of contaminated material as waste according to item 13.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
Keep away from ignition sources.
See Section 7 for information on safe handling
See section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

Additional information:

7 Handling and storage

Handling

Information for safe handling:

Handle under dry protective gas.
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.
Protect against electrostatic charges.
Fumes can combine with air to form an explosive mixture.
Substance/product is auto-flammable.

Storage

Requirements to be met by storerooms and containers:

Information about storage in one common storage facility:

No special requirements.

Store away from water.
Store away from air.(Contd. on page 2)
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Further information about storage conditions:

Store away from oxidizing agents.
Do not store together with acids.

Store under dry inert gas.
Protect from humidity and keep away from water.
Avoid contact with air / oxygen.
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.

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:

Copper fume, dusts and mists (as Cu)
mg/m³

ACGIH TLV	1 (dust, mist); 0.2 (fume)
Austria MAK	1; 0.1 (fume)
Belgium TWA	0.2 (fume); 1 (dust)
Denmark TWA	0.1
Finland TWA	0.2 (fume); 1 (dust)
France VME	0.2 (fume); 1 (dust); 1; 2-STEL (dust)
Germany MAK	0.1 (fume); 1 (dust)
Hungary TWA	0.2; 0.4-STEL (dust)
Korea TLV	1 (dust, mist); 0.2 (fume)
Netherlands MAC-TGG	1 (dust)
Norway TWA	0.05; 0.1 (fume)
Poland TWA	0.1 (fume); 0.3-STEL (fume)
Russia	1-STEL (dust)
Sweden NGV	0.2 (resp. dust); 1 (total dust)
Switzerland MAK-W	0.1; 0.2-KZG-W (fume)
	1; 1-KZG-W
United Kingdom TWA	0.2 (fume)
	1; 3-STEL (dusts and mist)
USA PEL TWA	0.1 (fume); 1 (dusts and mists)
No data	

Additional information:**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.

Breathing equipment:**Eye protection:**

Use breathing protection with high concentrations.
Safety glasses
Tightly sealed safety glasses.
Full face protection
Face protection
Protective work clothing.

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

Form:	Powder
Colour:	Yellow
	Light brown
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
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Inflammability (solid, gaseous)	Contact with water liberates extremely flammable gases.
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Ignition temperature:	Not determined
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Decomposition temperature:	Not determined
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Self-inflammability:	Spontaneously flammable in air.
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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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Solubility in / Miscibility with Water:	Contact with water releases flammable gases
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10 Stability and reactivity**Thermal decomposition / conditions to be avoided:****Materials to be avoided:**

No decomposition if used and stored according to specifications.
Water/moisture
Air
Oxidizing agents
Acids

Dangerous reactions:

Contact with water releases flammable gases
Spontaneously flammable in air.

Dangerous products of decomposition:

Inflammable gases/vapours
Carbon monoxide and carbon dioxide
Metal oxide

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11 Toxicological information

Acute toxicity:
Primary irritant effect:
on the skin:

Corrosive effect on skin and mucous membranes.
 Irritant for skin and mucous membranes.
 Strong corrosive effect.
 Irritant effect.

on the eye:

No sensitizing effect known.

Sensitization:

Additional toxicological information:

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
 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.

12 Ecological information:

Additional ecological information:
General notes:

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

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.

14 Transport information

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



ADR/RID-GGVS/E Class: 4.2 (S2) Substances liable to spontaneous combustion.
Kemler Number: 40
UN-Number: 3088
Packaging group: II
Label: 4.2
Designation of goods: 3088 SELF-HEATING SOLID, ORGANIC, N.O.S. (Copper (I) phenylacetylide)
Limited quantities (LQ) LQ0
Transport category 2
Tunnel restriction code D/E

Maritime transport IMDG/GGVSea:



IMDG/GGVSea Class: 4.2
UN Number: 3088
Label: 4.2
Packaging group: II
Marine pollutant: No
Correct technical name: SELF-HEATING SOLID, ORGANIC, N.O.S. (Copper (I) phenylacetylide)

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: 4.2
UN/ID Number: 3088
Label: 4.2
Packaging group: II
Correct technical name: SELF-HEATING SOLID, ORGANIC, N.O.S. (Copper (I) phenylacetylide)

UN "Model Regulation":

UN3088, SELF-HEATING SOLID, ORGANIC, N.O.S., 4.2, II

15 Regulatory information

Designation according to EC guidelines:

Code letter and hazard designation of product:



C Corrosive
 F Highly flammable

Risk phrases:

15 Contact with water liberates extremely flammable gases.
 17 Spontaneously flammable in air.
 34 Causes burns.

Safety phrases:

7/8 Keep container tightly closed and dry.
 20 When using do not eat or drink.
 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 33 Take precautionary measures against static discharges.
 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
 43 In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water.
 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.

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.

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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

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

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