

1 Identification of substance**Product details**

Trade name

2-Cyclopenten-1-one

Stock number:

B23408

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

Emergency information:

2 Hazards identification

Hazard designation:



Xi Irritant

Information pertaining to particular dangers for man and environment

R 10 Flammable.
R 37 Irritating to respiratory system.

GHS label elements

**Warning**

H226 - Flammable liquid and vapour.

**Warning**H335 - May cause respiratory irritation.
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Prevention:

Response:

P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.**3 Composition/information on ingredients**

Chemical characterization:

Designation: (CAS#)

2-Cyclopenten-1-one (CAS# 930-30-3): 100%

Identification number(s):

EINECS Number:

213-213-0

4 First aid measures

After inhalation

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.
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: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
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

Keep away from ignition sources

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).

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.

Measures for cleaning/collecting:

Additional information:

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.
Protect against electrostatic charges.
Fumes can combine with air to form an explosive mixture.

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.
Refrigerate**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.

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

Revision: 03.08.2010

Printing date 03.08.2010

Trade name 2-Cyclopenten-1-one

(Contd. of page 1)

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.
Breathing equipment:	Use breathing protection in case of insufficient ventilation.
Protection of hands:	Use protective gloves with high concentrations.
Material of gloves	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.
Eye protection:	Safety glasses
Body protection:	Face protection Protective work clothing.

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

Form:	Liquid
Colour:	Pale yellow
Smell:	Characteristic
Change in condition	
Melting point/Melting range:	Not determined
Boiling point/Boiling range:	150°C
Sublimation temperature / start:	Not determined
Flash point:	42°C
Ignition temperature:	Not determined
Decomposition temperature:	Not determined
Critical values for explosion:	
Lower:	Not determined
Upper:	Not determined
Steam pressure:	Not determined
Density at 20°C	1.01 g/cm ³

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:	
Primary irritant effect:	
on the skin:	May cause irritation
on the eye:	May cause irritation
Sensitization:	No sensitizing effect known.
Additional toxicological information:	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:	3 (F1) Flammable liquids.
Kemler Number:	30
UN-Number:	1224
Packaging group:	III
Label	3
Designation of goods:	1224 KETONES, LIQUID, N.O.S. (2-Cyclopenten-1-one)
Limited quantities (LQ)	LQ7
Transport category	3
Tunnel restriction code	D/E

Maritime transport IMDG/GGVSea:

IMDG/GGVSea Class:	3
UN Number:	1224

(Contd. on page 3)

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

Revision: 03.08.2010

Printing date 03.08.2010

Trade name **2-Cyclopenten-1-one**

(Contd. of page 2)

Label 3
Packaging group: III
Marine pollutant: No
Correct technical name: KETONES, LIQUID, N.O.S. (2-Cyclopenten-1-one)

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: 3
UN/ID Number: 1224
Label 3
Packaging group: III
Correct technical name: KETONES, LIQUID, N.O.S. (2-Cyclopenten-1-one)

UN "Model Regulation": UN1224, KETONES, LIQUID, N.O.S., 3, III

15 Regulatory information**Designation according to EC guidelines:****Code letter and hazard designation of product:**

Xi Irritant

Risk phrases:10 Flammable.
37 Irritating to respiratory system.**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.

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)

GB