

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 20.08.2010

Revision: 20.08.2010

1 Identification of substance

Product details

Trade name

1-Octen-3-one

Stock number:

L07189

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:



Xi Irritant

Information pertaining to particular dangers for man and environment

R 10 Flammable.
R 36/38 Irritating to eyes and skin.

GHS label elements

**Warning**

H226 - Flammable liquid and vapour.

**Warning**

H315 - Causes skin irritation.
 H319 - Causes serious eye irritation.
 P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 P241 Use explosion-proof electrical/ventilating/lighting/equipment.
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.
 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.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Prevention:

Response:

Disposal:

3 Composition/information on ingredients

Chemical characterization:

Designation: (CAS#)

1-Octen-3-one (CAS# 4312-99-6): 100%

Identification number(s):

224-327-5

EINECS Number:

Stabilized with:

0.1% BHA (CAS# 25013-16-5)

Additional information:

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 measures

Suitable extinguishing agents

CO2, sand, extinguishing powder. Do not use water.

For safety reasons unsuitable extinguishing agents

Water.

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

Can be released in case of fire:
 Carbon monoxide and carbon dioxide
 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.
 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.

Additional information:

7 Handling and storage

Handling

Information for safe handling:

Keep containers tightly sealed.
 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:
 Information about storage in one common storage facility:

Refrigerate

Store away from strong bases.
 Store in the dark.
 Protect from heat.

Further information about storage conditions:

Keep container tightly sealed.
 Protect from the effects of light.
 Refrigerate

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 20.08.2010

Revision: 20.08.2010

Trade name **1-Octen-3-one**

(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. Avoid contact with the eyes and skin. Use breathing protection with high concentrations. Check protective gloves prior to each use for their proper condition.
Breathing equipment:	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.
Protection of hands:	Impervious gloves
Material of gloves	Not determined
Penetration time of glove material	Safety glasses
Eye protection:	Face protection
Body protection:	Protective work clothing.

9 Physical and chemical properties:

General Information	
Form:	Liquid
Colour:	Colourless
Smell:	Characteristic
Change in condition	
Melting point/Melting range:	Not determined
Boiling point/Boiling range:	166-167°C
Sublimation temperature / start:	Not determined
Flash point:	35°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	0.848 g/cm ³
Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix

10 Stability and reactivity

Thermal decomposition / conditions to be avoided:	No decomposition if used and stored according to specifications. Danger of containers bursting upon heating.
Stable until:	Depletion of inhibitor.
Materials to be avoided:	Oxidizing agents Heat Acids Bases Ultraviolet radiation Free radical initiators
Dangerous reactions:	Danger of polymerisation Spontaneous polymerisation can be caused in unstabilised product e.g. by ambient heat
Dangerous products of decomposition:	Carbon monoxide and carbon dioxide
Additional information:	Unless inhibited, the product can polymerize resulting in a temperature and pressure increase that may rupture the container.

11 Toxicological information

Acute toxicity:	
Primary irritant effect:	
on the skin:	Irritant for skin and mucous membranes.
on the eye:	Irritant effect.
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:	Generally not hazardous for water. 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.

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 20.08.2010

Revision: 20.08.2010

Trade name **1-Octen-3-one**

(Contd. of page 2)

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. (1-Octen-3-one)
Tunnel restriction code: D/E

Maritime transport IMDG/GGVSea:

IMDG/GGVSea Class: 3
UN Number: 1224
Label: 3
Packaging group: III
Marine pollutant: No
Correct technical name: KETONES, LIQUID, N.O.S. (1-Octen-3-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. (1-Octen-3-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.
 36/38 Irritating to eyes and skin.

Safety phrases:
 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 37 Wear suitable gloves.

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:
 Generally not 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)