

1 Identification of substance**Product details**

Trade name **3-Hexanone**
Stock number: B20791
 L04492
Manufacturer/Supplier: Alfa Aesar
 Shore Road
 Port of Heysham Industrial Park
 Heysham Lancashire LA3 2XY
 United Kingdom
 Office Tel: +44 (0) 1524 850506
Informing department: Product safety department.
Emergency information: Call Carechem 24 at +44 (0) 1865 407333

2 Hazards identification**Hazard designation:**

F Highly flammable

Information pertaining to particular dangers for man and environment GHS label elements

R 11 Highly flammable.

**Danger**

H225 - Highly flammable liquid and vapour.
 P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 P403 Store in a well-ventilated place.

Prevention:**Storage:****3 Composition/information on ingredients****Chemical characterization:**

Designation: (CAS#) 3-Hexanone (CAS# 589-38-8)
Identification number(s):
EINECS Number: 209-645-4

4 First aid measures**After inhalation**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

After skin contactSeek 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:

Ensure adequate ventilation

Keep away from ignition sources

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

Measures for cleaning/collecting:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

Keep away from ignition sources.

Additional information:

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.

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.
 Store in cool, dry conditions in well sealed containers.

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**General protective and hygienic measures**

The usual precautionary measures should be adhered to in handling the chemicals.

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

Revision: 21.01.2010

Printing date 21.01.2010

Trade name **3-Hexanone**

(Contd. of page 1)

Breathing equipment:
Protection of hands:
Material of gloves

Eye protection:**Body protection:**

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.
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.
Safety glasses
Face protection
Protective work clothing.

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

Form:	Liquid
Colour:	Colourless
Smell:	Sweetish

Change in condition	
Melting point/Melting range:	Not determined
Boiling point/Boiling range:	119-121°C
Sublimation temperature / start:	Not determined

Flash point: 15°C**Ignition temperature:** Not determined**Decomposition temperature:** Not determined

Critical values for explosion:	
Lower:	Not determined
Upper:	Not determined

Steam pressure at 20°C: 18 hPa**Density at 20°C** 0.817 g/cm³**Solubility in / Miscibility with Water at 20°C:** 14 g/l**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:****LD/LC50 values that are relevant for classification:**

Oral	LD50	3360 µL/kg (rat)
Dermal	LD50	3170 µL/kg (rabbit)
Inhalative	LCLo/4H	4000 ppm/4H (rat)
Irritation of skin	mild	500 mg/24H (rabbit)
Irritation of eyes	mild	500 mg/24H (rabbit)

Primary irritant effect:**on the skin:** Causes mild irritant effect.**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:**

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.
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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:	II
Label	3
Designation of goods:	1224 KETONES, LIQUID, N.O.S. (vapor pressure at 50°C at most 110 kPa) (3-Hexanone)
Limited quantities (LQ)	LQ4
Transport category	2

(Contd. on page 3)
GB

Safety Data Sheet
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Revision: 21.01.2010

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Trade name **3-Hexanone**

(Contd. of page 2)

Tunnel restriction code D/E

Maritime transport IMDG/GGVSea:



IMDG/GGVSea Class: 3
 UN Number: 1224
 Label: 3
 Packaging group: II
 Marine pollutant: No
 Correct technical name: KETONES, LIQUID, N.O.S. (3-Hexanone)

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: 3
 UN/ID Number: 1224
 Label: 3
 Packaging group: II
 Correct technical name: KETONES, LIQUID, N.O.S. (3-Hexanone)

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

15 Regulatory information

Designation according to EC guidelines:

Code letter and hazard designation of product:



F Highly flammable

Risk phrases: 11 Highly flammable.

Safety phrases: 9 Keep container in a well-ventilated place.
16 Keep away from sources of ignition - No smoking.

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 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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