

1-Hexen-3-one: sc-264834



The Power to Question

MATERIAL SAFETY DATA SHEET

1 Identification of substance:

Product Name: 1-Hexen-3-one
Catalog Number: sc-264834
Supplier: Santa Cruz Biotechnology, Inc.
2145 Delaware Avenue
Santa Cruz, California 95060
800.457.3801 or 831.457.3800
Emergency: ChemWatch
Within the US & Canada: 877-715-9305
Outside the US & Canada: +800 2436 2255
(1-800-CHEMCALL) or call +613 9573 3112

2 Hazards identification

Classification of the substance or mixture



GHS02 Flame

H225 Highly flammable liquid and vapour.



GHS07

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xi; Irritant

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

R10: Flammable.

Label elements

Labelling according to EU guidelines:

Code letter and hazard designation of product:

Xi Irritant

Risk phrases:

10 Flammable.
36/37/38 Irritating to eyes, respiratory system and skin.

Safety phrases:

16 Keep away from sources of ignition - No smoking.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
37 Wear suitable gloves.

Hazard description:

WHMIS classification



Classification system

HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

HEALTH	1
FIRE	3
REACTIVITY	1

Health (acute effects) = 1
Flammability = 3
Reactivity = 1

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Substances

(CAS#) Description:

1-Hexen-3-one (CAS# 1629-60-3)

Identification number(s):

EINECS Number: 216-625-9

Impurities and stabilising additives: 0.5% 4-methoxyphenol

4 First aid measures

Description of first aid measures

After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm.

Seek immediate medical advice.

After skin contact

Immediately wash with water and soap and rinse thoroughly.

Seek immediate medical advice.

After eye contact

Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing Seek immediate medical advice.

5 Firefighting measures

Extinguishing media

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

For safety reasons unsuitable extinguishing agents Water

Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Carbon monoxide and carbon dioxide

Advice for firefighters

Protective equipment:

Wear self-contained respirator.

Wear fully protective impervious suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources

Environmental precautions:

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

Methods and material for containment and cleaning up:

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

Ensure adequate ventilation.

Keep away from ignition sources.

Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Handling

Precautions for safe handling

Keep container tightly sealed.

Ensure good ventilation at the workplace.

Information about protection against explosions and fires:

Keep ignition sources away.

Protect against electrostatic charges.

Fumes can combine with air to form an explosive mixture.

Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles: Refrigerate

Information about storage in one common storage facility:

Do not store together with oxidizing and acidic materials.

Store in the dark.

Protect from heat.

Further information about storage conditions:

Keep container tightly sealed.

Protect from exposure to light.

Refrigerate

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.

Control parameters

Components with limit values that require monitoring at the workplace: Not required.

Additional information: No data

Exposure controls

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Breathing equipment:

Use suitable respiratory protective device in case of insufficient ventilation.

Use suitable respirator when high concentrations are present.

Protection of hands:

Impervious gloves

Check protective gloves prior to each use for their proper condition.

Material of gloves

The selection of suitable gloves not only depends on the material, but also on quality.

Quality will vary from manufacturer to manufacturer.

Eye protection: Safety glasses

Body protection: Protective work clothing.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form:	Liquid
Formula:	C ₆ H ₁₀ O
Weight:	98.14

pH-value: Not determined.

Change in condition

Melting point/Melting range:	Not determined
Boiling point/Boiling range:	127-129°C (261-264 °F)
Sublimation temperature / start:	Not determined

Flash point: 22°C (72 °F)

Flammability (solid, gaseous) Not applicable.

Ignition temperature: Not determined

Decomposition temperature: Not determined

Auto igniting: Not determined.

Explosion limits:

Lower:	Not determined
Upper:	Not determined

Vapor pressure at 20°C (68 °F): 13 hPa (10 mm Hg)

Density at 20°C (68 °F): 0.84 g/cm³ (7.01 lbs/gal)

Relative density Not determined.

Vapour density Not determined.

Evaporation rate Not determined.

Solubility in / Miscibility with

Water: Slightly soluble

Segregation coefficient (n-octanol/water): Not determined.

Viscosity:

dynamic: Not determined.

kinematic: Not determined.

Other information No further relevant information available.

10 Stability and reactivity

Reactivity

Chemical stability

Thermal decomposition / conditions to be avoided:

Decomposition will not occur if used and stored according to specifications.

Danger of containers bursting upon heating.

Stable until: Depletion of inhibitor.

Possibility of hazardous reactions

Danger of polymerization

Spontaneous polymerization can be caused in unstabilized product e.g. by ambient heat

Incompatible materials:

Oxidizing agents

Acids

Heat

Ultraviolet radiation

Free radical initiators

Hazardous decomposition products: 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

Information on toxicological effects

Acute toxicity:

Primary irritant effect:

on the skin: Irritant to skin and mucous membranes.

on the eye: Irritating effect.

Sensitization: No sensitizing effects known.

Subacute to chronic toxicity:

Other than potential irritation (see above), no information on illness or injury to humans from acute or chronic exposure to this product is available.

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

Toxicity

Acquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods

Recommendation Consult state, local or national regulations to ensure proper disposal.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

14 Transport information

DOT regulations:



Hazard class:	3
Identification number:	UN1224
Packing group:	II
Proper shipping name (technical name):	KETONES, LIQUID, N.O.S. (1-Hexen-3-one)
Label	3

Land transport ADR/RID (cross-border)



ADR/RID class: 3 (F1) Flammable liquids
Danger code (Kemler): 33
UN-Number: 1224
Packaging group: II
UN proper shipping name: 1224 KETONES, LIQUID, N.O.S. (1-Hexen-3-one)

Maritime transport IMDG:



IMDG Class: 3
UN Number: 1224
Label: 3
Packaging group: II
Marine pollutant: No
Proper shipping name: KETONES, LIQUID, N.O.S. (1-Hexen-3-one)

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: 3
UN/ID Number: 1224
Label: 3
Packaging group: II
Proper shipping name: KETONES, LIQUID, N.O.S. (1-Hexen-3-one)

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

Special precautions for user Warning: Flammable liquids

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

15 Regulatory information

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

Product related hazard informations:

Hazard symbols:

Xi Irritant

Risk phrases:

10 Flammable.

36/37/38 Irritating to eyes, respiratory system and skin.

Safety phrases:

16 Keep away from sources of ignition - No smoking.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

37 Wear suitable gloves.

National regulations

This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only.

Some or all of the components of this product are not listed on the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL).

Information about limitation of use: For use only by technically qualified individuals.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information:

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.