

OTTO CHEMIE PVT LTD

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ISO 9001: 2015

MATERIAL SAFETY DATA SHEET

1. Identification

1.1 GHS Product identifier

H 1387 1-Hexanol, GR 99%+

1.2 Other means of identification

Product number

-

Other names

n-C6H13OH

1.3 Recommended use of the chemical and restrictions on use

Identified uses

For industry use only. Food additives -> Flavoring Agents

Uses advised against

no data available

1.4 Supplier's details

Company

WWW.GuideChem.COM

Address

8F, Block C, No.3 Building, Zijin Plaza, No.701, Gudun Road,
Hangzhou, Zhejiang 310030, China

Telephone

+86-571-89739798

Fax

86(21)54365166

1.5 Emergency phone number

Emergency phone number

+86-571-89739798

Service hours

Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours).

2. Hazard identification

2.1 Classification of the substance or mixture

Acute toxicity - Oral, Category 4

2.2 GHS label elements, including precautionary statements

Pictogram(s)



Signal word

Warning

Hazard statement(s)

H302 Harmful if swallowed

Precautionary statement(s)

Prevention

P264 Wash ... thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

Response

P301+P312 IF SWALLOWED: Call a POISON

CENTER/doctor/2026 if you feel unwell.

P330 Rinse mouth.

Storage

none

Disposal

P501 Dispose of contents/container to ...

2.3 Other hazards which do not result in classification

none

3. Composition/information on ingredients

3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
hexan-1-ol	hexan-1-ol	111-27-3	none	100%

4. First-aid measures

4.1 Description of necessary first-aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

Fresh air, rest.

In case of skin contact

Rinse and then wash skin with water and soap.

In case of eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

If swallowed

Rinse mouth. Do NOT induce vomiting. Give one or two glasses of water to drink.

4.2 Most important symptoms/effects, acute and delayed

Liquid causes eye burns and skin irritation. Breathing vapors is not expected to cause systemic illness. (USCG, 1999)

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Basic Treatment: Establish a patent airway (oropharyngeal or nasopharyngeal airway, if needed). Suction if necessary. Watch for signs of respiratory insufficiency and assist ventilations if necessary. Administer oxygen by nonrebreather mask at 10 to 15 L/min. Monitor for shock and treat if necessary ... Monitor for pulmonary edema and treat if necessary ... Anticipate seizures and treat if necessary ... For eye contamination, flush eyes immediately with water. Irrigate each eye continuously with 0.9% saline (NS) during transport ... Do not use emetics. For ingestion, rinse mouth and administer 5 ml/kg up to 200 ml of water for dilution if the patient can swallow, has a strong gag reflex, and does not drool. Administer activated charcoal ... /Higher alcohols (>3 carbons) and related compounds/

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use carbon dioxide, dry chemical or "alcohol" foam extinguisher. Water is ineffective to fire fighting, but is effective to keep fire-exposed containers cool.

5.2 Specific hazards arising from the chemical

Excerpt from ERG Guide 129 [Flammable Liquids (Water-Miscible / Noxious)]: HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Those substances designated with a (P) may polymerize explosively when heated or involved in a fire. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Many liquids are lighter than water. (ERG, 2016)

5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions

Personal protection: filter respirator for organic gases and vapours adapted to the airborne concentration of the substance. Collect leaking and spilled liquid in covered containers as far as possible. Absorb remaining liquid in sand or inert absorbent. Then store and dispose of according to local regulations.

6.3 Methods and materials for containment and cleaning up

Absorb on paper. Evaporate on a glass or iron dish in hood. Burn the paper.

7. Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Separated from strong oxidants. Protect containers against physical damage. Keep containers closed and store in well-ventilated, cool place.

8. Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure limit values

no data available

Biological limit values

no data available

8.2 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Respiratory protection

Wear dust mask when handling large quantities.

Thermal hazards

no data available

9. Physical and chemical properties

Physical state Clear, colorless liquid with a fruity odor.

Colour Colorless liquid

Odour Characteristic; sweet alcohol; pleasant

Melting point/ freezing point -45\u00b0C(lit.)

Boiling point or initial boiling point and boiling range 156-157\u00b0C(lit.)

Flammability Combustible.

Lower and upper explosion limit / flammability limit Flammable Limits in Air: 1.2%-7.7% (calculated)

Flash point 60°C
Auto-ignition temperature 292.78°C
Decomposition temperature no data available
pH no data available
Kinematic viscosity 0.592 cP at 25°C
Solubility In water: 6 g/L (25°C)
Partition coefficient n-octanol/water (log value) log Kow = 2.03
Vapour pressure 1 mm Hg (25.6°C)
Density and/or relative density 0.814 g/mL at 25°C (lit.)
Relative vapour density 4.5 (vs air)
Particle characteristics no data available

10. Stability and reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Flammable liquid when exposed to heat, sparks or flame. HEXANOL is an alcohol. Flammable and/or toxic gases are generated by the combination of alcohols with alkali metals, nitrides, and strong reducing agents. They react with oxoacids and carboxylic acids to form esters plus water. Oxidizing agents convert them to aldehydes or ketones. Alcohols exhibit both weak acid and weak base behavior. They may initiate the polymerization of isocyanates and epoxides.

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Can react with oxidizing materials.

10.6 Hazardous decomposition products

no data available

11. Toxicological information

Acute toxicity

Oral: LD50 Mouse oral 1950 mg/kg

Inhalation: LC50 Mouse inhalation >21 mg/L/1 hr

Dermal: no data available

Skin corrosion/irritation

no data available

Serious eye damage/irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

STOT-single exposure

no data available

STOT-repeated exposure

no data available

Aspiration hazard

no data available

12. Ecological information

12.1 Toxicity

Toxicity to fish: LC50 Pimephales promelas (Fathead minnow, weight 0.12 g) 97.5 mg/L 96 hr flow-through bioassay, water hardness 45.5 mg/L CaCO₃, temp: 25 ± 1°C, pH 7.5, dissolved oxygen >60% of saturation.

Toxicity to daphnia and other aquatic invertebrates: LC50 Daphnia magna (Water flea) 240 mg/L/24 hr; static /formulated product

Toxicity to algae: no data available

Toxicity to microorganisms: no data available

12.2 Persistence and degradability

AEROBIC: 5-Day theoretical BODs of 28%(1), 53% (initial concn of 100 ppm)(2) and 83.6% (initial concn of 2,000 ppm)(3) were observed for 1-hexanol in aerobic screening tests using a sewage inocula. An aerobic biodegradation rate constant of 7.99×10^{-2} 1/hr(4), which corresponds to a half-life of 0.36 days(SRC), was determined in an aerobic screening test at pH 7 and 25°C using an activated sludge inocula. In a similar screening test, the rate constant was measured to be 1.7×10^{-2} 1/hr(5), which corresponds to a biodegradation half-life of 1.7 days(SRC).

12.3 Bioaccumulative potential

An estimated BCF of 21 was calculated for 1-hexanol(SRC), using a log Kow of 2.03(1) and regression-derived equation(2). According to a classification scheme(3), this BCF suggests the potential for bioconcentration in aquatic organisms is low(SRC).

12.4 Mobility in soil

A Koc of 10.2 was determined for 1-hexanol on a Hagerstown silt loam soil(1). According to a suggested classification scheme(2), this Koc value suggests that 1-hexanol is expected to have very high mobility in soil.

12.5 Other adverse effects

no data available

13. Disposal considerations

13.1 Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

14. Transport information

14.1 UN Number

ADR/RID: UN2282

IMDG: UN2282

IATA: UN2282

14.2 UN Proper Shipping Name

ADR/RID: HEXANOLS

IMDG: HEXANOLS

IATA: HEXANOLS

14.3 Transport hazard class(es)

ADR/RID: 3

IMDG: 3

IATA: 3

14.4 Packing group, if applicable

ADR/RID: III

IMDG: III

IATA: III

14.5 Environmental hazards

ADR/RID: no

IMDG: no

IATA: no

14.6 Special precautions for user

no data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

15. Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
hexan-1-ol	hexan-1-ol	111-27-3	none
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
China Catalog of Hazardous chemicals 2015			Not Listed.
New Zealand Inventory of Chemicals (NZIoC)			Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Listed.
Vietnam National Chemical Inventory			Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			Listed.

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.