

MATERIAL SAFETY DATA SHEET

Product Name: Butyl acrylate

Issue date:2019.9.15

Section 1 - Chemical Product and Company Identification

MSDS Name: Butyl acrylate

Synonyms: 2-Propenoic acid, butyl ester; Butyl 2-propenoate

Company Identification: HENAN GP CHEMICALS CO.,LTD
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Molecular Wt.: 128.2

Section 2 – Composition/Information on Ingredients

Chemical Name: Butyl acrylate

CAS No.: 141-32-2

Hazardous ingredients

Butyl acrylate

Content (W/W): 99.5 %

Flam. Liq.: Cat. 3

Acute tox.: Cat. 4 (Inhalation -vapour)

Acute tox.: Cat. 4 (oral)

Acute tox.: Cat. 3 (dermal)

Skin corr./irr.: Cat. 1A

STOT single: Cat. 3 (irr. to respiratory syst.)

Eco acute: Cat. 1

Eco chronic: Cat. 1

Section 3 - Hazard identification

EMERGENCY OVERVIEW

Flammable. Irritating to eyes, respiratory system and skin. May cause sensitization by skin contact.Light sensitive.

Potential Health Effects

Eye:

Causes eye irritation.

Skin:

Causes skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident

upon re-exposure to this material.

May be harmful if absorbed through the skin.

Ingestion:

Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May be harmful if swallowed.

Inhalation:

Causes respiratory tract irritation. May cause central nervous system effects such as nausea and headache.

Chronic:

No information found.

Section 4 First-Aid Measures

General advice:

Immediately remove contaminated clothing. If danger of loss of consciousness, place patient in recovery position and transport accordingly. Apply artificial respiration if necessary. First aid personnel should pay attention to their own safety.

If inhaled:

Immediately inhale corticosteroid dose aerosol. Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:

Flush with copious amounts of water for at least 15 minutes. Sterile protective dressing. Immediate medical attention required.

On contact with eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:

Immediately rinse mouth and then drink plenty of water, do not induce vomiting, seek medical attention.

Note to physician:

Symptoms: skin corrosion

Hazards: Risk of pulmonary edema. Symptoms can appear later.

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote, administer corticosteroid dose aerosol to prevent pulmonary odema.

Section 5 Fire-Fighting Measures

Suitable extinguishing media:

carbon dioxide, dry extinguishing media, water spray, foam

Specific hazards:

Risk of violent self-polymerization if overheated in a container. Explosive-like polymerization

Further information:

Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure build up due to heat. The product or its combustible parts are soluble in water. Contaminated extinguishing water must be disposed of in accordance with official regulations.

In case of a fire in the vicinity a restabilization system should be used if the temperature in the storage container reaches 45°C. Evacuate area of all unnecessary personnel. In case of a fire in the vicinity evacuate all personnel in a greater area if the temperature in the storage container reaches 60°C.

Section 6 Accidental Release Measures

Personal precautions:

Use personal protective clothing.

Environmental precautions:

Do not discharge into waterways or sewer systems without proper authorization. Contain contaminated water/firefighting water.

Methods for cleaning up or taking up:

For small amounts: Neutralize with lime. For large amounts: Pump off product. Pick up with suitable absorbent material (e.g. acid binder). Dispose of absorbed material in accordance with regulations. For residues: Pick up with suitable absorbent material (e.g. acid binder). Dispose of absorbed material in accordance with regulations. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

Section 7 Handling and Storage

Handling:

Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Wash clothing before reuse. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation. Keep away from heat, sparks and flame.

Avoid breathing vapor or mist. Pure vapor will be uninhibited and may polymerize in vents or other confined spaces.

Storage:

Keep away from sources of ignition. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Do not store under inert atmosphere.

Section 8 Exposure controls and personal protection

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for lower concentrations or short-term effect: Gas filter for gases/vapours of organic compounds (boiling point >65 °C, e. g. EN 14387 Type A)

Hand protection:

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): butyl rubber (butyl) -0.7 mm coating thickness

Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing. Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:

Tightly fitting safety goggles (cage goggles) (e.g. EN 166) and face shield., Wear face shield if splashing hazard exists.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust)., protection boots (f.e. according to EN 20346), antistatic

General safety and hygiene measures:

Avoid contact with skin. Avoid inhalation of vapour.

Section 9 Physical and Chemical Properties

Form: liquid

Colour: colourless

Odour: fruity odor

pH value: not applicable

boiling temperature: approx. 145 °C(1.013 bar)

Flash point: 46 °C (closed cup)

Flammability (solid/gas): Flammable. (other)

Lower explosion limit: 1.3 %(V)

Upper explosion limit: 9.9 %(V)

Explosion hazard: not explosive (other)

Fire promoting properties: not fire-propagating (other)

Vapour pressure:

5.45mm Hg 25 °C

Density: 0.9 g/cm³ (DIN 51757) (20 °C)

Solubility in water: miscible

Solubility (qualitative) solvent(s): organic solvents Miscible

Partitioning coefficient n-octanol/water (log Pow): 0.46 (OECD Guideline 107)(25 °C)
OECD harmonized ring method)

Molar mass: 128.2 g/mol

Section 10 Stability and Reactivity

Chemical Stability:

Stable. However, it may undergo explosive polymerization if uninhibited. May polymerize on exposure to light. Polymerization may occur upon heating. Stable only if stored and handled under recommended conditions. The stability of the product depends upon the availability of both dissolved oxygen and MEHQ inhibitor(CAS=150-76-5). The presence of oxygen is necessary for the MEHQ to function effectively. The product should never be stored under an inert gas atmosphere, but should always be stored under an atmosphere containing 5-21% oxygen by volume.

This material is a monomer and may polymerize under certain conditions if the stabilizer is lost.

Conditions to Avoid:

Light, ignition sources, moisture, excess heat, loss of inhibitor.

Incompatibilities with Other Materials:

Strong oxidizing agents, catalytic metals, organotin catalysts, strong acids, amines, peroxides, strong bases, halogens.

Hazardous Decomposition Products:

Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization: May occur.

Section 11 Toxicological Information

RTECS#:

CAS# 141-32-2: UD3150000 CAS# 150-76-5: SL7700000 LD50/LC50:

CAS# 141-32-2: Draize test, rabbit, eye: 50 mg Mild; Draize test, rabbit, eye: 500 mg/24H Mild;

Inhalation, mouse: LC50 = 7800 mg/m³/2H; Inhalation, rat: LC50 = 2730 ppm/4H; Oral, mouse:

LD50 = 5880 mg/kg; Oral, rat: LD50 = 900 mg/kg; Skin, rabbit: LD50 = 2 mL/kg.

CAS# 150-76-5: Draize test, rabbit, skin: 6 gm/12D (Intermittent) Mild; Draize test, rabbit, skin:

10%; Oral, rat: LD50 = 1600 mg/kg.

Carcinogenicity:

Butyl acrylate - Not listed by ACGIH, IARC, or NTP.

Hydroquinone monomethyl ether - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information. RTECS#:

CAS# 141-32-2: UD3150000 CAS# 150-76-5: SL7700000 LD50/LC50:

CAS# 141-32-2: Draize test, rabbit, eye: 50 mg Mild; Draize test, rabbit, eye: 500 mg/24H Mild;

Inhalation, mouse: LC50 = 7800 mg/m³/2H; Inhalation, rat: LC50 = 2730 ppm/4H; Oral, mouse:

LD50 = 5880 mg/kg; Oral, rat: LD50 = 900 mg/kg; Skin, rabbit: LD50 = 2 mL/kg.

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Section 12 Ecological Information

Ecotoxicity:

Fish: Goldfish: LC50 = 5.0 mg/L; 72 Hr.; Unspecified Water flea Daphnia: EC50 = 4230 mg/L; 24

Hr.; Unspecified Bacteria: Phytobacterium phosphoreum: EC50 = 30.8-37.0 mg/L; 5,15,30 minutes;

Microtox test, 15 degrees C

Section 13 Disposal Considerations

Must be sent to a suitable incineration plant, observing local regulations.

Contaminated packaging:

Uncleaned empties should be disposed of in the same manner as the contents.

Section 14 Transport Information

IATA

Shipping Name: BUTYL ACRYLATES, INHIBITED

Hazard Class: 3

UN Number: 2348

Packing Group: III

IMO

Shipping Name: BUTYL ACRYLATES, INHIBITED

Hazard Class: 3.3

UN Number: 2348

Packing Group: III

RID/ADR

Shipping Name: BUTYL ACRYLATES, INHIBITED

Hazard Class: 3

UN Number: 2348

Packing group: III

Section 15 Regulatory Information

European/International Regulations
European Labeling in Accordance with EC Directives

Hazard Symbols: Xi

Risk Phrases:

R 10 Flammable.

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

R 43 May cause sensitization by skin contact.

Safety Phrases:

S 9 Keep container in a well-ventilated place.

WGK (Water Danger/Protection)

CAS# 141-32-2: 1

CAS# 150-76-5: 1

Canada

CAS# 141-32-2 is listed on Canada's DSL List.

CAS# 150-76-5 is listed on Canada's DSL List.

CAS# 141-32-2 is listed on Canada's Ingredient Disclosure List.

CAS# 150-76-5 is listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 141-32-2 is listed on the TSCA inventory.

CAS# 150-76-5 is listed on the TSCA inventory.

Section 16 Other Information

Recommended use: for industrial use only

Unsuitable for use: cosmetics, Pharmaceutical

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.