

Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Product name: Benzyl Alcohol

Reference number(SDS):68047jis_E-2

Product type:

Quasi-drug raw materials

※This product conform to JSQI(Japanese Standards of Quasi-drug Ingredients).

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the product: Fragrances, Preservatives, Solvents, Viscosity-reducing agent

Uses advised against: Do not use for other purposes.

Details of the supplier of the safety data sheet

Manufacturer/Supplier: JUNSEI CHEMICAL CO., LTD.

Address: 1-6, Ohmano-cho, Koshigaya-shi, Saitama 343-0844, Japan

Division: Quality Assurance Department

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2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

PHYSICAL AND CHEMICAL HAZARDS

Flammable liquids: Category 4

HEALTH HAZARDS

Acute toxicity (Oral): Category 4

Acute toxicity (Dermal): Category 4

Serious eye damage/eye irritation: Category 2

Skin sensitization: Category 1A

Specific target organ toxicity – single exposure: Category 1(central nervous system, kidney)

Specific target organ toxicity – single exposure: Category 3(Narcosis)

Specific target organ toxicity – repeated exposure: Category 1(central nervous system)

ENVIRONMENT HAZARDS

Hazardous to the aquatic environment (Acute): Category 2

(Note) GHS classification without description: Not classified/Classification not possible

Label elements



Signal word: Danger

HAZARD STATEMENT

H227-Combustible liquid

H302-Harmful if swallowed

H312-Harmful in contact with skin

H319-Causes serious eye irritation

H317-May cause an allergic skin reaction

H370-Causes damage to organs

H336-May cause drowsiness or dizziness

H372–Causes damage to organs through prolonged or repeated exposure

H401–Toxic to aquatic life

PRECAUTIONARY STATEMENT

Prevention

Avoid release to the environment.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Do not breathe dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

Wash contaminated parts thoroughly after handling.

Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves/protective clothing/eye protection/face protection.

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

Response

In case of fire: Use foam,dry powder,CO2 to extinguish.

Get medical advice/attention if you feel unwell.

Call a POISON CENTER/doctor/physician if you feel unwell.

IF exposed or concerned: Call a POISON CENTER/doctor/physician.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF SWALLOWED: Rinse mouth. Call a POISON CENTER/doctor/physician if you feel unwell.

Storage

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Disposal

Dispose of contents/container in accordance with local/national regulation.

Specific Physical and Chemical hazards

Heating may cause fire.

3. Composition/information on ingredients

Mixture/Substance selection:

Substance

Ingredient name: Benzyl alcohol

Content (%): 97.0 <

Chemical formula: C₇H₈O

Chemicals No, Japan: 3-1011

CAS No.: 100-51-6

MW: 108.14

ECNO: 202-859-9

4. First-aid measures

Descriptions of first-aid measures

General measures

Get medical advice/attention if you feel unwell.

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor/physician if you feel unwell.

IF ON SKIN (or hair)

Take off immediately all contaminated clothing. Rinse skin with water or shower.

Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

IF IN EYES

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF SWALLOWED

Rinse mouth.

Call a POISON CENTER/doctor/physician if you feel unwell.

Most important symptoms and effects, both acute and delayed

(Symptoms when inhalation or ingestion)

Nausea. Vomiting. Abdominal pain. Diarrhoea. Headache. Drowsiness. Cough. Dizziness.

(Symptoms when skin and/or eye contact)

Conjunctival redness of the eyes. Redness of the skin.

5. Fire-fighting measures**Extinguishing media****Suitable extinguishing media**

In case of fire, use foam, dry powder, CO₂ to extinguish.

Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

Specific hazards arising from the substance or mixture

Containers may explode when heated.

Fire may produce irritating, corrosive and/or toxic gases.

Runoff from fire control or dilution water may cause pollution.

Advice for firefighters**Specific fire-fighting measures**

Evacuate non-essential personnel to safe area.

Special protective equipment and precautions for fire-fighters

Wear fire resistant or flame retardant clothing.

Wear protective gloves/protective clothing/eye protection/face protection.

Firefighters should wear self-contained breathing apparatus with full face piece operated positive pressure mode.

6. Accidental release measures**Personnel precautions, protective equipment and emergency procedures**

Ventilate area until material pick up is complete.

Wear proper protective equipment.

Environmental precautions

Avoid release to headsprings, rivers, lakes, ocean and groundwater.

Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

Preventive measures for secondary accident

Collect spillage.

7. Handling and storage

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Do not breathe dust/fume/gas/mist/vapors/spray.

(Protective measures against fire and explosion)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(Exhaust/ventilator)

Exhaust/ventilator should be available.

(Safety treatments)

Avoid contact with skin.

Avoid contact with eyes.

Safety Measures

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

Use personal protective equipment as required.

When using do not eat, drink or smoke.

Any incompatibilities

Strong oxidizing agents should not be mixed with the chemicals.

Advice on general occupational hygiene

Wash contaminated parts thoroughly after handling.

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

Contaminated work clothing should not be allowed out of the workplace.

Take off contaminated clothing and wash it before reuse.

Storage

Conditions for safe storage

Store in a well-ventilated place. Keep container tightly closed.

Keep cool. Protect from sunlight.

Store in accordance with local/national regulation.

Store locked up.

Container and packaging materials for safe handling data is not available.

Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

8. Exposure controls/personal protection

Control parameters

Control value in MHLW is not available.

Adopted value

JSOH(2019) (ceiling) 25mg/m³

Adopted value in ACGIH is not available.

Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

Individual protection measures

Respiratory protection

Wear respiratory protection.

Hand protection

Wear protective gloves. Recommended material(s): butyl rubber, viton

Consult with your glove and/or personnel equipment manufacturer for selection of

appropriate compatible materials.

Eye protection

Wear safety glasses with side-shields.

Wear eye/face protection.

Skin and body protection

Wear impervious clothing and boots in case of repeated or prolonged treatment.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state: Liquid

Color: Colorless

Odor: Slight characteristic odor

Odor threshold data is not available.

Melting point/Freezing point: -15°C

Boiling point or initial boiling point: 205°C

Boiling range data is not available.

Flammability (gases, liquids and solids): Ignitable

Lower and upper explosion limit/flammability limit:

Lower explosion limit: 1.3 vol %

Upper explosion limit: 13 vol %

Flash point: (c.c.) 93°C

Auto-ignition temperature: 436°C

Decomposition temperature: $\geq 870^{\circ}\text{C}$

Self-Accelerating Decomposition Temperature/SADT data is not available.

pH data is not available.

Dynamic viscosity: 5.474mPas(25°C)

Kinematic viscosity data is not available.

Solubility:

Solubility in water: 40g/liter(20°C)

Solubility in solvent: Soluble in benzene, methanol, chloroform, ethanol, ether and acetone.

n-Octanol/water partition coefficient: log Pow1.1

Vapor pressure: 13.2 Pa (20°C)

Vapor density data is not available.

Density and/or relative density: 1.042~1.053($20/20^{\circ}\text{C}$)

Relative vapor density (Air=1): 3.7

Relative density of the Vapor/air - mixture at 20°C (Air = 1): 1.0

Particle characteristics data is not available.

Other information

Critical temperature: 441.85°C

Evaporation rate data is not available.

VOC data is not available.

10. Stability and Reactivity

Reactivity

Runaway polymerization will not occur.

Chemical stability

Stable under normal storage/handling conditions.

It is slowly oxidized to benzaldehyde and benzoic acid on exposure to air.

Possibility of hazardous reactions

Reacts with strong oxidants.

Attacks some forms of plastic (e.g. Polyvinyl chloride).

On combustion, forms toxic gases.

Conditions to avoid

Contact with incompatible materials.

Open flames. Heat. Sparks.

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Carbon oxides

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Acute toxicity (Oral)

[GHS Cat. Japan, base data]

rat LD50=1200mg/kg (JECFA FAS48, 2001)

Acute toxicity (Dermal)

[GHS Cat. Japan, base data]

rabbit LD50=2000mg/kg (SIDS, 2004)

Acute toxicity (Inhalation)

[GHS Cat. Japan, base data]

mist: rat LC50 >4.178mg/L/4hr (OECD TG403, GLP) (SIDS, 2004)

Irritant properties

Skin corrosion/irritation

[GHS Cat. Japan, base data]

rabbit (OECD TG404) : no irritation (SIDS, 2004)

Serious eye damage/irritation

[GHS Cat. Japan, base data]

rabbit (OECD TG405) : moderate irritation (SIDS, 2004)

Sensitization

Skin sensitization

[GHS Cat. Japan, base data]

cat.1A (JSOH Documentation, 2019 et al.)

Mutagenic effects data is not available.

Carcinogenic effects data is not available.

Reproductive toxicity data is not available.

STOT

STOT-single exposure

[cat.1]

[GHS Cat. Japan, base data]

central nervous system,kidneys (Journal of Japanese Association for Acute Medicine vol. 29, p.254, 2018)

[cat.3 (drow./dizz.)]

[GHS Cat. Japan, base data]

narcotic effect (MOE risk assessment vol.11, 2013; SIDS, 2004)

STOT-repeated exposure

[cat.1]

[GHS Cat. Japan, base data]

central nervous system (PATTY 6th, 2012)

Aspiration hazard data is not available.

12. Ecological Information

Ecotoxicity

Aquatic toxicity

H401-Toxic to aquatic life

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Hazardous to the aquatic environment (Acute)

[GHS Cat. Japan, base data]

Fish (Lepomis macrochirus) LC50=10mg/L/96hr (MOE risk assessment vol.11, 2013)

Hazardous to the aquatic environment (Long-term)

[GHS Cat. Japan, base data]

Crustacea (Daphnia magna) NOEC=51mg/L/21days (MOE risk assessment vol.11, 2013)

Water solubility

40 g/L(20°C) (SIDS, 2004)

Persistence and degradability

Degrade rapidly

[BOD_Degradation : 94% (METI Existing Chemical Substances Safety Inspections Data, 1991)]

Bioaccumulative potential

log Pow=1.1 (PHYSPROP Database, 2019)

Mobility in soil

Mobility in soil data is not available.

Other adverse effects

Ozone depleting chemical data is not available.

13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

Waste treatment methods

Avoid release to the environment.

Dispose of contents/container in accordance with local/national regulation.

14. Transport Information

UN No., UN CLASS

UN No. or ID No.: Not applicable

UN Proper Shipping Name : Not applicable

Class or division (Transport hazard class) : Not applicable

Packing group : Not applicable

Not applicable to IMDG Code

Not applicable to IATA Dangerous Goods Regulations

Environmental hazards

MARPOL Annex III – Prevention of pollution by harmful substances

Marine pollutants (yes/no) : no

MARPOL Annex V – Prevention of pollution by garbage discharge

Specific target organ toxicity – repeated exposure: cat.1

Benzyl alcohol

Maritime transport in bulk according to IMO instruments

Noxious Liquid ; Cat. Y

Benzyl alcohol(Y-399)

15. Regulatory Information

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

U.S. Toxic Substances Control Act (TSCA) Inventory

Chemicals listed in TSCA Inventory

100-51-6

All components are listed or exempted.

Other regulatory information

We are not able to check up the regulatory information with regard to the substances in

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your country or region, therefore, we request this matter would be filled by your responsibility.

Regulatory information with regard to this substance in your country or in your region should be examined by your own responsibility.

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

Regulatory information in this section are limited to intentional ingredient(s), but does not contain information on non-intentional ingredients or impurities which are not informed by supplier(s).

Chemical safety assessment

Advice on safe handling for this product can be found in sections 7 and 8 of this SDS.

16. Other information

GHS classification and labelling

H227-Flam. Liq. 4: H227 Combustible liquid

H302-Acute Tox. 4: H302 Harmful if swallowed

H312-Acute Tox. 4: H312 Harmful in contact with skin

H319-Eye Irrit. 2: H319 Causes serious eye irritation

H317-Skin Sens. 1A: H317 May cause an allergic skin reaction

H370-STOT SE 1: H370 Causes damage to organs

H336-STOT SE 3: H336 May cause drowsiness or dizziness

H372-STOT RE 1: H372 Causes damage to organs through prolonged or repeated exposure

H401-Aquatic Acute 2: H401 Toxic to aquatic life

Reference Book

Globally Harmonized System of classification and labelling of chemicals, UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 21th edit., 2019 UN

IMDG Code, 2018 Edition (Incorporating Amendment 39-18)

IATA Dangerous Goods Regulations (62nd Edition) 2021

2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2022 TLVs and BEIs. (ACGIH)

JIS Z 7252 : 2019

JIS Z 7253 : 2019

2021 Recommendation on TLVs (JSOH)

Supplier's data/information

Chemicals safety data management system "GHS Assistant" Version 4.18 (<https://www.asahi-ghs.com/>)

NITE Chemical Risk Information Platform "NITE-CHRIP"

(https://www.nite.go.jp/en/chem/chrip/chrip_search/systemTop)

GHS Classification Guidance for Enterprises 2019 Revised Edition (Ver. 2.0) (Mar. 2020, METI)

Definitions and Abbreviations

SDS (Safety Data Sheet)

LD50 (Lethal Dose, 50%)

LC50 (Lethal Concentration, 50%)

IARC (International Agency for Research on Cancer)

ACGIH (American Conference of Governmental Industrial Hygienists)

EPA (US Environmental Protection Agency)

NTP (US National Toxicology Program)

JSOH (Japan Society for Occupational Health)

EU (European Union)

EC50 (Effective Concentration, 50%)

NOEC (No Observed Effect Concentration)

BOD (Biochemical Oxygen Demand)

COD (Chemical Oxygen Demand)

BCF (Bioconcentration Factor)

anh (anhydride)

General Disclaimer

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

The GHS classification data given here is based on current Japan official data (NITE published in 2020).