



Safety Data Sheet

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

Product identifier:

Product name: Acetic acid / Glacial acetic acid(Food Additive)

SDS No. : 0023E-5

Recommended use of the chemical and restrictions on use

Research and Development, Food additives (Conforming product for Japan's Specifications and Standards for Food Additives only)

Details of the supplier of the safety data sheet

Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD.

Address: 3-1, Honmachibashi, Chuo-ku, Osaka, JAPAN

Division: Chemical Safety Management Department

Telephone number: +81-6-6946-8061

FAX: +81-6-6946-1607

Section 2. Hazards identification

Classification of the substance or mixture

PHYSICAL AND CHEMICAL HAZARDS

Flammable liquids: Category 3

HEALTH HAZARDS

Acute toxicity (Dermal): Category 4

Skin corrosion/irritation: Category 1

Serious eye damage/eye irritation: Category 1

Specific target organ toxicity – single exposure: Category 1 (blood, respiratory system)

ENVIRONMENT HAZARDS

Hazardous to the aquatic environment, short-term (acute): Category 3

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

Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements

H226 Flammable liquid and vapor

H312 Harmful in contact with skin

H314 Causes severe skin burns and eye damage

H370 Causes damage to organs (blood, respiratory system)

H402 Harmful to aquatic life

Precautionary statements

Prevention

P273 Avoid release to the environment.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.



- P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting equipment.
P242 Use non-sparking tools.
P243 Take action to prevent static discharges.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P264 + P265 Wash hands thoroughly after handling. Do not touch eyes.
P270 Do not eat, drink or smoke when using this product.

Response

- P370 + P378 In case of fire: Use appropriate media to extinguish.
P308 + P316 IF exposed or concerned: Get emergency medical help immediately.
P316 Get emergency medical help immediately.
P317 Get medical help.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P302 + P352 IF ON SKIN: Wash with plenty of water.
P302 + P361 + P354 IF ON SKIN: Take off immediately all contaminated clothing. Immediately rinse with water for several minutes.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water or shower.
P363 Wash contaminated clothing before reuse.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P305 + P354 + P338 IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Storage

- P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal

- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Specific danger/hazard**Health hazard**

See "11. Toxicological Information".

Section 3. Composition/information on ingredients**Substance/mixture:****Substance**

Ingredient name	Content (%)	CAS RN	ENCS	Chemical formula
Acetic acid	≥99	64-19-7	2-688	CH ₃ COOH

Note : The figures shown above are not the specifications of the product.

Section 4. First aid measures**Descriptions of first aid measures****General measures**

IF exposed or concerned: Get emergency medical help immediately.

**IF INHALED**

IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Get medical help if you feel unwell.

IF ON SKIN

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water or shower.
IF ON SKIN: Wash with plenty of water.
Get emergency medical help immediately.
If skin irritation or rash occurs: Get medical help.

IF IN EYES

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Get medical help.
If eye irritation persists: Get medical help.

IF SWALLOWED

Rinse mouth.
Do NOT induce vomiting.
IF SWALLOWED: Get medical help if you feel unwell.

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

Use appropriate extinguishing media suitable for surrounding facilities.
In case of fire, use spraying loaded liquid, foam (water-soluble liquid: alcohol-resistant foam), inactive gases, dry powder, dry sand to extinguish.
*Fire Service Act Group 4 Hazardous Materials

Unsuitable extinguishing media

Indoor Fire Plug System or Outdoor Fire Plug System
Sprinkler System
Dry Chemical Extinguishing System-Others (except for phosphates etc., Hydrogen Carbonates etc.)
Fire Extinguisher Discharging Jet Water/Spraying Water
Fire Extinguisher Discharging Jet Loaded Liquid
Fire Extinguisher Discharging Dry Extinguishing agents-Others (except for phosphates etc., Hydrogen Carbonates etc.)
Water Bucket or Water Tank
*Cabinet Order Concerning the Control of Hazardous Materials (Attached Table 5) Group 4 Hazardous Materials

Specific hazards arising from the substance or mixture

Fire may produce irritating, corrosive and/or toxic gases.
Runoff from fire control or dilution water may cause pollution.
See "10.Stability and Reactivity".

Advice for firefighters**Special extinguishing method**

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 a full facepiece operated



in the positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unauthorized personnel away.

Ventilate area until material pick up is complete.

Wear proper protective equipment.

Environmental precautions

Prevent spills from entering sewers, watercourses, low areas or rivers. To be careful not discharged to the environment without being properly handled waste water contaminated.

Methods and materials for containment and cleaning up

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

Solid: Sweep up, place in a bag and hold for waste disposal.

Preventive measures for secondary accident

Collect spillage.

Section 7. Handling and storage

Precautions for safe handling

Engineering measures

(Measures to prevent operator exposure)

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

(Measures to prevent fire and explosion)

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

Ground and bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use non-sparking tools.

Take action to prevent static discharges.

(Local ventilation/general ventilation)

Exhaust/ventilator should be available.

(Precautions)

Avoid contact with skin.

Avoid contact with eyes.

Advice on safe handling

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

Wash hands and contaminated parts thoroughly after handling.

When using do not eat, drink or smoke.

Avoidance of contact

See Section 10: Stability and Reactivity.

Advice on general occupational hygiene

Wash hands thoroughly after handling.

Do not touch eyes.

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

Take off contaminated clothing and wash it before reuse.

Conditions for safe storage, including any incompatibilities

Conditions for safe storage

Keep container tightly closed.



Store locked up. (P405)
Store in a cool, dry place. Do not store in direct sunlight.
Storage in accordance with local/national regulation.
Safe packaging material
Use closed unbreakable containers.

Section 8. Exposure controls/personal protection

Control parameters

Permissible concentration

Administrative Control Levels and Concentration standard value

Concentration standard value TWA: 15ppm

Occupational exposure limit values

The Japan Society for Occupational Health

10ppm; 25mg/m³

ACGIH

TWA: 10ppm; STEL: 15ppm (URT & eye irr; pulm func)

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, such as personal protective equipment

Recommend to use protective equipment in conformity with the standards.

Use appropriate protective equipment in accordance with local/national regulation.

Respiratory protection

Wear respiratory protection (dust-proof mask/gas mask). Select chemical cartridge corresponding to type of gases when using a gas mask.

Hand protection

Wear impervious protective glove.

Eye/face protection

Wear eye/face protection. Wear safety goggles in cases gas is generated.

Skin and body protection

Wear protective clothing.

Section 9. Physical and Chemical Properties

Physical state: Crystals to liquid

Color: Colorless to white

Odor: Pungent odour

Melting point/Freezing point: 16.7°C

Boiling point or initial boiling point and boiling range: (Acetic acid)118°C

Flammability data is not available.

Lower and upper explosion limit/flammability limit:

Lower explosion limit: 6.0 vol %

Upper explosion limit: 17 vol %

Flash point: (Acetic acid)(C.C.) 39°C

Auto-ignition temperature: (Acetic acid)485°C

Decomposition temperature data is not available.

pH data is not available.

Kinematic viscosity data is not available.

**Solubility:**

Solubility in water: Soluble

Solubility in solvent data is not available.

Partition coefficient n-octanol/water (log value): -0.17

Vapor pressure: 1.5 kPa (20°C)

Density and/or relative density: 1.05

Relative vapor density (Air=1): 2.1

Relative density of the Vapor/air – mixture at 20°C (Air = 1): 1.02

Particle characteristics data is not available.

Other information

Other information is not available.

Section 10. Stability and Reactivity**Reactivity**

Not available.

Chemical stability

Stable under normal storage/handling conditions.

Possibility of hazardous reactions

The substance is a weak acid. Reacts violently with strong oxidants. This generates fire and explosion hazard. Reacts violently with strong bases, strong acids and many other compounds. Attacks some forms of plastic, rubber and coatings. (ICSC 0363)

Conditions to avoid

Contact with incompatible materials.

Contact with fire source.

Incompatible materials

Strong acids, Strong bases, Strong oxidizing agents

Hazardous decomposition products

Carbon oxides

Section 11. Toxicological Information**Information on toxicological effects****Acute toxicity****Acute toxicity (Oral)**

[Data for components of the product]

[NITE-CHRIIP]

rat LD50: 3310 mg/kg (source: NITE)

Acute toxicity (Dermal)

[Product]

Category 4, Harmful in contact with skin

[Data for components of the product]

[NITE-CHRIIP]

rabbit LD50: 1060 mg/kg (source: NITE)

Skin corrosion/irritation

[Product]

Category 1, Causes severe skin burns and eye damage

[Data for components of the product]

[NITE-CHRIIP]

Category 1 (source: NITE)



Serious eye damage/irritation

[Product]

Category 1, Causes serious eye damage

[Data for components of the product]

[NITE-CHRIP]

Category 1 (source: NITE)

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

Carcinogenic effects data is not available.

Reproductive toxicity data is not available.

Specific target organ toxicity – single exposure

[Product]

Category 1, Causes damage to organs

[Data for components of the product]

[NITE-CHRIP]

Category 1 (blood, respiratory system) (source: NITE)

Specific target organ toxicity – repeated exposure data is not available.

Aspiration hazard data is not available.

Section 12. Ecological Information

Toxicity

Aquatic toxicity

[Product]

Category 3, Harmful to aquatic life

[Data for components of the product]

Hazardous to the aquatic environment, short-term (acute)

[NITE-CHRIP]

Crustacea (Daphnia magna) 48-hour EC50: 65000 μ g/L (source: NITE)

Water solubility

miscible (source: ICSC, 2010)

Persistence and degradability

[Data for components of the product]

Rapidly degradable (Degradation rate: 74% (by BOD)) (source: NITE)

Bioaccumulative potential

[Data for components of the product]

log Pow: -0.17 (source: NITE)

Mobility in soil

Mobility in soil data is not available.

Other adverse effects

Ozone depleting chemical data is not available.

Section 13. Disposal considerations

Waste treatment methods

Waste from residues

Avoid release to the environment.

Dispose of contents/container as industrial waste. Accordance with local/national regulation.



Section 14. Transport Information**UNRTDG**

UN number : UN2789

UN Proper Shipping Name : ACETIC ACID, GLACIAL or ACETIC ACID SOLUTION, more than 80% acid, by mass

Transport hazard class(es) : 8

Subsidiary hazard(s) : 3

Packing group : II

IMDG Code (International Maritime Dangerous Goods Regulations)

UN number : UN2789

UN Proper Shipping Name : ACETIC ACID, GLACIAL or ACETIC ACID SOLUTION, more than 80% acid, by mass

Transport hazard class(es) : 8

Subsidiary hazard(s) : 3

Packing group : II

IATA (Dangerous Goods Regulations)

UN number : UN2789

UN Proper Shipping Name : ACETIC ACID, GLACIAL or ACETIC ACID SOLUTION, more than 80% acid, by mass

Transport hazard class(es) : 8

Subsidiary hazard(s) : 3

Hazard labels : Corrosive & Flamm. liquid

Packing group : II

Environmental hazards

Marine pollutants (yes/no) : no

Environmentally hazardous substance/mixture (yes/no) : no

ERG GUIDE No.: 132

Section 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

Applicable

Other regulatory information

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

Section 16. Other information

References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 23rd edit., 2023 UN

IMDG Code, 2024 Edition (Incorporating Amendment 42-24)

IATA Dangerous Goods Regulations (67th Edition) 2026

2024 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2026 TLVs and BEIs. (ACGIH)

JIS Z 7252 : 2025

JIS Z 7253 : 2025



Recommendation of occupational exposure limits (2024-2025) (JSOH)

Supplier's data/information

General Disclaimer

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Unauthorized translation or modification is prohibited.

Please provide SDS to customers for selling or transferring.

All chemicals have unknown hazard. Handle the product with care.

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 Data published in Japan (National Institute of Technology and Evaluation (NITE) Chemical Risk Information Platform (NITE-CHRIP), up to FY2024).