Date of issue: 24/12/2013
revised date 15/02/2016

Safety Data Sheet

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

Product identifier:

Product name: Acetic acid

Product code(SDS NO): 31010jis_J_E1-2

Details of the supplier of the safety data sheet

Manufacturer/Supplier: JUNSEI CHEMICAL CO., LTD.
Address: 1-6, Ohmano-Cho, Koshigaya, Saitama 343-0844, Japan
Division: Quality Assurance Department
Telephone number: +81-48-986-6161
FAX: +81-48-989-2787
e-mail address: shiyaku-t@junsei.co.jp

2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

PHYSICAL 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 - acute hazard: Category 3

(Note) GHS classification without description: Not applicable/Out of classification/Not classifiable

Label elements

Signal word: Danger

HAZARD STATEMENT

Flammable liquid and vapor

Harmful in contact with skin

Causes severe skin burns and eye damage

Causes serious eye damage

Causes damage to organs after single exposure

Harmful to aquatic life

PRECAUTIONARY STATEMENT

Prevention

Avoid release to the environment.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Do not breathe dust/fume/gas/mist/vapors/spray.
Wash contaminated parts thoroughly after handling.
Wear protective gloves, protective clothing or face protection.
Wear protective gloves and face protection.
Wear eye protection/face protection.
Do not eat, drink or smoke when using this product.

Response

In case of fire: Use appropriate media.
Immediately call a POISON CENTER or 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 ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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 SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Storage

Store in a well-ventilated place. Keep cool.
Store locked up.

Disposal

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

Physical and Chemical hazards

Flammable liquid. Vapor/air mixture may explode.

3. Composition/information on ingredients

Substance/Mixture:

Substance

Ingredient name:Acetic acid
Content(%):99.0 <
Chemical formula:C2H4O2
Chemicals No, Japan:2-688
CAS No.:64-19-7
MW:60.05
ECNO:200-580-7

4. First-aid measures

Descriptions of first-aid measures

General measures

Immediately call a POISON CENTER or doctor/physician.

IF INHALED

Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.

IF ON SKIN(or hair)

Take off immediately all contaminated clothing. Rinse skin with water/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. Do NOT induce vomiting.

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

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

In case of fire, use water mist, foam, dry powder, CO2.

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.

Cool container with water spray.

Special protective equipment and precautions for fire-fighters

Wear fire/flame resistant/retardant clothing.

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

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

6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Ventilate area after material pick up is complete.

Wear proper protective equipment.

Environmental precautions

Avoid release to the rivers, lakes, ocean, 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 & explosion)

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Exhaust/ventilator

Exhaust/ventilator should be available.

Safety treatments

Avoid contact with skin.

Avoid contact with eyes.

Avoid breathing dust, vapor, mist, or gas.

Safety Measures/Incompatibility

Wear protective gloves, protective clothing or face protection.

Wear protective gloves and face protection.

Wear eye protection/face protection.
Use personal protective equipment as required.
When using do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities

Recommendation for storage

Store in a well-ventilated place. Keep container tightly closed.
Keep cool. Protect from sunlight.
Store locked up.

8. Exposure controls/personal protection

Control parameters

Adopted value

ACGIH(2003) TWA: 10ppm
STEL: 15ppm (URT & eye irr; pulm func)

OSHA-PEL

TWA 10ppm, 25mg/m3

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.

Eye protection

Wear eye/face protection.

Safety and Health measures

Wash ... thoroughly after handling.
Do not eat, drink or smoke when using this product.
Take off contaminated clothing and wash it before reuse.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical properties

Appearance: Liquid
Color: Colorless-Clear
Odor: Irritant odor
pH: 2.4 (1.0M soln)

Phase change temperature

Initial Boiling Point/Boiling point: 118℃
Melting point/Freezing point: 16.7℃
Decomposition temperature data N.A.
Flash point: (c.c.)39℃
Auto-ignition temperature: 427℃

Explosive properties: Flammability or explosive limit

lower limit: 5.4 vol %
upper limit: 16 vol %

Vapor pressure: 1.5 kPa (20℃)
Relative Vapor Density (Air=1): 2.1
Relative density of the Vapor/air-mixture at 20℃ (Air = 1): 1.02

Specific gravity/Density: ca. 1.05g/ml
Solubility
Solubility in water: Miscible
Solubility in solvent: Miscible with ethanol, diethyl ether.
n-Octanol /water partition coefficient: log Pow-0.31

10. Stability and Reactivity

Chemical stability
Stable under normal storage/handling conditions.
Flammable.
Possibility of hazardous reactions
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.
Conditions to avoid
Contact with incompatible materials.
Open flames. Heat.
Incompatible materials
Strong acids, Strong bases, 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=3310 mg/kg (PATTY 5th, 2001)
Acute toxicity (Dermal)
[GHS Cat. Japan, base data]
rabbit LD50=1060 mg/kg (PATTY 5th, 2001)
Irritant properties
Skin corrosion/irritation
[GHS Cat. Japan, base data]
rabbit/guinea pig : severe burn (PATTY 5th, 2001 et al.)
Serious eye damage /irritation
[GHS Cat. Japan, base data]
rabbit : permanent corneal damage (IUCLID, 2000 et al.)
No Allergenic and sensitizing effects data available
Germ cell mutagenicity
[GHS Cat. Japan, base data]
No in vivo data available.
Reverse-mutation assay in bacteria(Ames test) :Negative(PATTY 5th, 2001)
Chromosome aberration test :Negative(CHO cell; PATTY 5th, 2001)
No Carcinogenic effects data available
No Teratogenic effects data available
No reproductive toxicity data available
Delayed and immediate effects and also chronic effects from short- and long-term exposure
STOT
STOT-single exposure
[cat.1]
[Japan published data]

blood/blood system; respiratory apparatus/system (ACGIH, 2004)

No Aspiration hazard data available

12. Ecological Information

Toxicity

Aquatic toxicity

Harmful to aquatic life

Aquatic acute toxicity component(s) data

[GHS Cat. Japan, base data]

Crustacea(Daphnia magna) EC50=65 mg/L/48hr (AQUIRE, 2010)

Water solubility

Miscible (ICSC, 2010)

Persistence and degradability

BOD_Degradation : 74% (Registered chemicals data check & review, Japan)

Bioaccumulative potential

log Pow=-0.17 (PHYSPROP Database, 2005)

13. Disposal considerations

Waste treatment methods

Avoid release to the environment (- if this is not the intended use).

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

14. Transport Information

UN No, UN CLASS

UN number: 2789

UN proper shipping name:ACETIC ACID, GLACIAL or ACETIC ACID SOLUTION, more than 80% acid, by mass

Transport hazard class(es): 8

Transport subsidiary risks: 3

Packing group: II

ERG GUIDE NO.: 132

Transport in bulk according to Annex II of MARPOL73/78 and IBC Code

Noxious Liquid ; Cat. Z…Acetic acid

15. Regulatory Information

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

US major regulations

TSCA

Acetic acid

Other regulatory information

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

16. Other information

GHS classification and labelling

Flam. Liq. 3: H226 Flammable liquid and vapor

Acute Tox. 4: H312 Harmful in contact with skin
Skin Corr. 1: H314 Causes severe skin burns and eye damage
Eye Dam. 1: H318 Causes serious eye damage
STOT SE 1: H370 Causes damage to organs after single exposure
Aquatic Acute 3: H402 Harmful to aquatic life

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (5th ed., 2013), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 18th edit., 2013 UN Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012)
2012 EMERGENCY RESPONSE GUIDEBOOK(US DOT)
2015 TLVs and BEIs. (ACGIH)
http://monographs.iarc.fr/ENG/Classification/index.php
Supplier's data/information
Chemical Risk Information Platform (CHRIP)(NITE) http://www.safe.nite.go.jp/japan/db.html
GHS Classification Guidance for Enterprises 2013 Revised Edition （August, 2013,METI)

General Disclaimer

This information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. It are advised to make their own tests to determinate the safety and suitability of each such product or combination for their own purposes.
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.