

SARAYASARAYA CO., LTD.
SAFETY DATA SHEET**Product name:** Acecide Reagent 1**Preparation Date** : Apr. 18, 2022**Revision Date** : Mar. 26, 2024**Review Date** : -**Revision No.** : 4

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**Product name** Acecide Reagent 1**Supplier** SARAYA CO., LTD.
2-2-8 Yuzato, Higashisumiyoshi-ku,
Osaka, JAPAN 546-0013
Tel. No. : 06-6797-2525
Fax No. : 06-6797-2290**Recommended use of the product and restrictions on use****Recommended use** For chemical sterilization, inactivation and disinfection of medical instruments.**Restrictions on use** Use in combination with Acecide Reagent 2 (buffering agent).
Use the product only for the recommended purposes.**2. HAZARDS IDENTIFICATION****GHS Classification****Physical and chemical hazards**

Oxidizing liquids Category 2

Health Hazards

Acute toxicity (Oral) Category 3

Skin corrosion/irritation Category 1

Serious eye damage/eye irritation Category 1

Germ cell mutagenicity Category 2

Specific target organ/systemic toxicity following single exposure
Category 1 (Blood)
Category 1 (Respiratory system)Specific target organ/systemic toxicity following repeated exposure
Category 2 (Liver)
Category 2 (Respiratory organ)**Environmental Hazards**

Hazardous to the aquatic environment short-term (acute) Category 2

Hazardous to the aquatic environment long-term (chronic) Category 3

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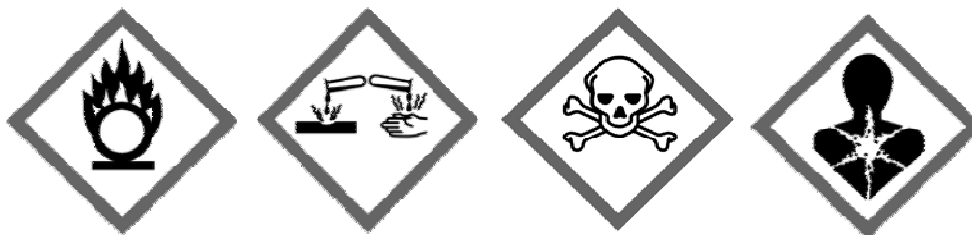
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GHS label elements

Pictograms



Signal words

Danger

Hazard statements

May intensify fire; Oxidizing substances

Causes severe skin burns and eye damage.

Causes serious eye damage.

Toxic if inhaled.

Suspected of causing genetic defects.

Causes damage to blood and respiratory systems.

May cause damage to organs (liver and respiratory organ) through prolonged or repeated exposure.

Toxic to aquatic life.

Harmful to aquatic life with long lasting effects.

Precautionary statements

[Prevention]

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

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

Keep away from clothing and other combustible materials.

Do not breathe mist or vapors.

Wear protective gloves, protective clothing, eye protection and face protection.

Use only outdoors or in a well-ventilated area.

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

Wash hands and face thoroughly after handling.

Avoid release to the environment.

[Response]

IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water.

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

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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.

If exposed or concerned: Immediately call a doctor.

Wash contaminated clothing before reuse.

In case of fire, use suitable extinguishing media to extinguish.

[Storage]

Store in a well-ventilated place.

Store locked up.

[Disposal]

Dispose of contents and container in accordance with the Waste Disposal and Public Cleaning Law and other laws and regulations.

Other hazards which do not result in classification

Contamination by impurities in a closed container may cause decomposition of hydrogen peroxide yielding oxygen gas, potentially resulting in explosion.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Preparation Preparation
Components

Chemical name	CAS No.	Concentration (%w/w)
HYDROGEN PEROXIDE	7722-84-1	<10
PERACETIC ACID	79-21-0	<10
ACETIC ACID	64-19-7	30 - 40

4. FIRST AID MEASURES

Inhalation

Immediately evacuate the patient to a well-ventilated area and allow the patient to rest with a posture that provides for easy breathing.

Immediately call a doctor. If experiencing respiratory symptoms, call a doctor.

Skin contact

Take off immediately all contaminated clothing. Thoroughly wash off the product with clean running water or shower.

Immediately call a doctor.

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Eye contact

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

Ingestion

Immediately rinse the mouth with water. Do not induce vomiting. Immediately call a doctor.
Drink plenty of water or milk (Do not administer to people who have an allergy to them).

5. FIRE FIGHTING MEASURES

Suitable extinguishing media

Use water as extinguishing media, however, if the product is mixed with large amounts of organic medium and oil, use foam, powder or carbon dioxide extinguishing media.

Unsuitable extinguishing media

Nothing special

Specific hazards in case of fire

Caution! Oxygen is produced by decomposition of peracetic acid and hydrogen peroxide in this product, which will intensify flames.

Specific fire extinguishing methods

If fire does occur in the surrounding area, transfer the container to a safe place.
If impossible, sprinkle the container and the circumference with water to protect the container.

Special protective equipment for firefighters

Wear protective equipment and extinguish the fire from an upwind position.
Wear respiratory protective equipment such as a respirator if there is a possibility of inhaling product vapor or mist.
Applying a water spray, keep a safe distance and use shielding where available.

6. ACCIDENTAL RELEASE MEASURES

Personal precaution, protective equipment and emergency procedures

Wear personal protective equipment during spill recovery operations.
Keep others away from the spill/leak and evacuate upwind.

Environmental precautions

Avoid release to the environment.

Methods and material for containment and cleaning up

For small spills, dilute the spillage with large amounts of water and wash away the material.

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For large spills, direct to a safe area, prevent spills from entering sewers or waterways, and then let it naturally decompose. Wash residues away with large amounts of water. Disposal should be done in accordance with local and national regulations.

Prevention of secondary disaster

Do NOT collect spills in the original container.

7. HANDLING AND STORAGE

Handling

Technical measures

Take measures to the facilities described in Section 8. Exposure Controls/ Personal Protection and wear personal protective equipment.

Take precautionary measures to avoid the product mixing with inflammables, acids, organic substances, metals or alkaline substances.

Take precautionary measures to avoid leakage or spills.

Use only outdoors or in a well-ventilated area.

Precautions for safe handling

Use the product only for the intended purposes.

Do not apply the product directly onto skin.

Keep out of reach of children.

Ensure proper ventilation.

Wear protective equipment such as gloves, mask, and goggles when using this product.

Do not mix with other chemicals.

Do not transfer the product to other containers.

Store container with the cap pointing upwards.

Tipping the container on its side may cause liquid to leak out.

Use the product only for dedicated equipment.

Avoidance of Contact

Not known

Hygiene measures

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

Wash contaminated clothing before reuse.

Do not eat, drink and/or smoke before handling the product.

Thoroughly wash hands and face after handling product.

Storage

Conditions for safe storage

Store at the temperature of 1°C - 25°C in the light-shielded area.

Store locked up.

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Ensure a water supply is available near the storage area, in case of spills.

Store in a well-ventilated area, avoiding high temperatures. (Keep out of direct sunlight in a cool, dark place.)

Use a lid with air ventilation holes. (If stored in a tank, install a vent pipe.) Do not completely seal the container.

Compatible materials for storage container

Do not use material that promotes decomposition of hydrogen peroxide.

Materials derived from fluorocarbon polymers such as high-density polyethylene (HDPE), polytetrafluoroethylene (PTFE).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Control parameter**

Japan Society for Occupational Health (2022) 10ppm (for acetic acid)

ACGIH (2019) STEL 0.4ppm (for peracetic acid)

(2009) TWA 10ppm (for acetic acid)

STEL 15ppm (for acetic acid)

(2013) TWA 1ppm (for hydrogen peroxide)

Appropriate engineering control

Install emergency shower and eye wash stations in the handling area. Ensure emergency stations are well signposted.

Personal protection**Respiratory protection**

Protective face mask. When necessary, use a gas mask rated for acidic gases.

Hand protection

Protective gloves

Eye and face protection

Eye protection

Skin and body protection

Wear long-sleeve protective clothing, safety helmet and safety shoes.

Do not use leather protective equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES**Physical state**

Liquid

Color

Clear, Colorless

Odor

Characteristic odor similar to vinegar

Melting point/freezing point

-28°C

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Boiling point or initial boiling point and boiling range	Not known
Flammability	Not known
Lower and upper explosion limit /flammability limit	Not known
Flash point	Not known
Auto-ignition temperature	Not known
Decomposition temperature	Not known
pH	2.7-3.3 (as a 1% solution)
Kinematic viscosity	Not known
Solubility	Dissolve in water in any ratio.
Vapor pressure	Not known
Density and/or relative density	1.1 (20°C)
Relative vapor density	Not known
Particle characteristics	Not known
Concentration of peracetic acid	5.4-6.8%

10. STABILITY AND REACTIVITY

Reactivity

Stable under normal handling, storage, and/or transport conditions.

Chemical stability

Stable under normal handling conditions.

Possibility of hazardous reactions

Not known

Conditions to avoid

Not known

Incompatible materials

If the product is mixed with heavy metals, alkaline agents or reducing agents, it will promote decomposition of hydrogen peroxide and peracetic acid, generating oxygen gas, which may cause sealed containers to rupture.

Hazardous decomposition products

Not known

Additional information

Promotes combustion

The heat produced by a fire causes decomposition of hydrogen peroxide and peracetic acid into oxygen gas which may intensify fire.

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11. TOXICOLOGICAL INFORMATION

Acute toxicity

Category 3 (toxic if inhaled)

Skin corrosion/irritation

Category 1 (causes severe skin burns and eye damage)

Serious eye damage/eye irritation

Category 1 (causes serious eye damage)

Respiratory sensitization/skin sensitization

Classification not possible

Germ cell mutagenicity

Category 2 (suspected of causing genetic defects)

Carcinogenicity

Classification not possible

Reproductive toxicity

Classification not possible

Specific target organ/systemic toxicity following single exposure

Category 1 (causes damage to blood or respiratory systems)

Specific target organs/systemic toxicity following repeated exposure

Category 2 (may cause damage to liver or respiratory organ)

Aspiration hazard

Classification not possible

Industrial Safety and Health Act

Contains less than 10% w/w of hydrogen peroxide, notifiable substance No. 126.

Contains 30-40% w/w of acetic acid, notifiable substance No. 176.

Contains 6% w/w of peracetic acid, notifiable substance No. 125-2.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Hazardous to the aquatic environment short-term (acute)

Category 2 (Toxic to aquatic life)

Hazardous to the aquatic environment long-term (chronic)

Category 3 (Harmful to aquatic life with long lasting effects)

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BOD 74% (acetic acid)

Bioaccumulative potential

Not known

Mobility in soil

Not known

Hazardous to the ozone layer

Not known

Japanese Pollutant Release and Transfer Register (PRTR)

Contains 6.0% peracetic acid, Class 1 Designated Chemical Substance No. 603.

13. DISPOSAL CONSIDERATIONS**Information on safe handling for disposal and methods of disposal, including any contaminated packaging**

See section 7, Handling and storage.

International regulations

Disposal should be done in accordance with local, state, and national laws.

Waste residues

Discharge the effluent after confirming the effluent properties (pH, COD) comply with the standard. Seepage in sewage treatment facility may cause problems, thus below-mentioned countermeasure should be done.

- ① Thorough dilution before disposal.
- ② Use base solution to neutralize and degrade hydrogen peroxide and peracetic acid.
- ③ Degrade hydrogen peroxide and peracetic acid by using reducing agent such as sodium sulfite.

Contaminated containers and packaging

Disposal should be done in accordance with local, state, and national laws.

Collect the waste product. The waste liquid used for rinsing should be treated as for waste residues.

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14. TRANSPORT INFORMATION

See section 7, Handling and storage.

UN regulations

UN number:

3098

Proper Shipping Name: OXIDIZING LIQUID, CORROSIVE, N.O.S. (contains HYDROGEN PEROXIDE, ACETIC ACID)

UN classification: Oxidizing substance

Class: 5.1

Subsidiary Hazard: 8

Packing Group: III

15. REGULATORY INFORMATION

International regulations

It is the responsibility of the user to know and comply with all relevant rules, regulations and laws in the local, state, national and international level relating to the product being used.

Japanese regulations

Enforcement Order of the Industrial Safety and Health Act

Not applicable because the PMD Act (The Amended Pharmaceutical Affairs Law) is applicable to the product.

Japanese Pollutant Release and Transfer Register (PRTR)

Contains 6.0% peracetic acid, Class 1 Designated Chemical Substance No. 603.

Ship Safety Law

Notification establishing standards for the transport of dangerous goods by vessels, etc. appended table No.1, oxidizing substances

Civil Aeronautics Act

Notification establishing standards for transport of explosives, etc. by aircraft appended table No. 1, oxidizing substances

Poisonous and Deleterious Substances Control Act

Deleterious substances not for medical use

PMD Act (The Amended Pharmaceutical Affairs Law)

Prescription drugs

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16. OTHER INFORMATION

Reference material

GHS Mixture Classification and Labels Creation System (NITE-Gmiccs)

This SDS is compliance with JIS Z 7253:2019.

Disclaimer

Any of the above information may be changed without prior notice.

This document is complete and thorough to the best of our knowledge.

Note that information is provided in order to use the product safely, not to guarantee the safety of the product.

Precautions are intended for normal handling, but in the case of special handling, please implement it after taking new safety measures suitable for the application and usage.

Use the product properly according to its specifications.

As with all chemicals, at the present time there are some unknown facts about the chemicals contained in this product and thus, the product should be handled with care. It is the responsibility of each individual user to set the conditions in which the product can be safely used.