

Material Safety Data Sheet

Version 3.1
Revision Date 02/16/2009
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1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Peracetic Acid Solution, ca. 39% in Acetic Acid

Product Number : 77240
Brand : Sigma-Aldrich

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

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2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS-No.	EC-No.	Index-No.	Concentration
Hydrogen peroxide			
7722-84-1	231-765-0	008-003-00-9	<= 6 %
peracetic acid ... %			
79-21-0	201-186-8	607-094-00-8	<= 39 %
Acetic acid			
64-19-7	200-580-7	607-002-00-6	<= 45 %

3. HAZARDS IDENTIFICATION**Emergency Overview****OSHA Hazards**

Combustible Liquid, Organic Peroxide, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Harmful by skin absorption., Corrosive, Carcinogen

Target Organs

Teeth., Kidney, Eyes, Skin, Respiratory system

HMIS Classification

Health Hazard: 3
Chronic Health Hazard: *
Flammability: 2
Physical hazards: 1

NFPA Rating

Health Hazard: 3
Fire: 2
Reactivity Hazard: 1

Special hazard.: OX

Potential Health Effects

Inhalation	Toxic if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Skin	Harmful if absorbed through skin. Causes skin burns.
Eyes	Causes eye burns.
Ingestion	Toxic if swallowed. Causes burns.

4. FIRST AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Continue rinsing eyes during transport to hospital. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Flammable properties

Flash point 56 °C (133 °F) - closed cup

Ignition temperature no data available

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

Further information

Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods for cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

7. HANDLING AND STORAGE

Handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.
Keep away from combustible material.

Storage

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature: 2 - 8 °C

Light sensitive.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
Acetic acid	64-19-7	TWA	10 ppm 25 mg/m3	1994-09-01	USA. ACGIH Threshold Limit Values (TLV)
		STEL	15 ppm 37 mg/m3	1994-09-01	USA. ACGIH Threshold Limit Values (TLV)
		TWA	10 ppm 25 mg/m3	1989-03-01	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
		TWA	10 ppm 25 mg/m3	1993-06-30	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
Hydrogen peroxide	7722-84-1	TWA	1 ppm 1.4 mg/m3	1996-05-18	USA. ACGIH Threshold Limit Values (TLV)
Remarks	Confirmed animal carcinogen with unknown relevance to humans: The agent is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histologic type(s), or by mechanism(s) that may not be relevant to worker exposure. Available epidemiologic studies do not confirm an increased risk of cancer in exposed humans. Available evidence does not suggest that the agent is likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure. 1996 Adoption Refers to Appendix A -- Carcinogens.				
		TWA	1 ppm 1.4 mg/m3	1989-03-01	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
		TWA	1 ppm 1.4 mg/m3	1993-06-30	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves.

Eye protection

Safety glasses

Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Other protection

Faceshield (8-inch minimum).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	liquid
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Safety data

pH	no data available
Melting point	no data available
Boiling point	no data available
Flash point	56 °C (133 °F) - closed cup
Ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure	27 hPa (20 mmHg) at 25 °C (77 °F)
Density	1.13 g/cm ³
Water solubility	no data available

10. STABILITY AND REACTIVITY

Storage stability

Stable under recommended storage conditions.

Materials to avoid

Strong reducing agents, Strong bases, Soluble carbonates and phosphates, Amines, Alcohols, Heavy metal salts

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity

no data available

Irritation and corrosion

no data available

Sensitisation

no data available

Chronic exposure

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Hydrogen peroxide)

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Potential Health Effects

Inhalation	Toxic if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Skin	Harmful if absorbed through skin. Causes skin burns.
Eyes	Causes eye burns.
Ingestion	Toxic if swallowed. Causes burns.
Target Organs	Teeth., Kidney, Eyes, Skin, Respiratory system,

12. ECOLOGICAL INFORMATION**Elimination information (persistence and degradability)**

no data available

Ecotoxicity effects

no data available

Further information on ecology

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Very toxic to aquatic organisms.

13. DISPOSAL CONSIDERATIONS**Product**

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION**DOT (US)**

UN-Number: 3105 Class: 5.2 (8)

Packing group: II

Proper shipping name: Organic peroxide type D, liquid (Peroxyacetic acid, type D, stabilized)

Marine pollutant: No

Poison Inhalation Hazard: No

IMDG

UN-Number: 3105 Class: 5.2 (8)

EMS-No: F-J, S-R

Proper shipping name: ORGANIC PEROXIDE TYPE D, LIQUID (PEROXYACETIC ACID, TYPE D)

Marine pollutant: No

IATA

UN-Number: 3105 Class: 5.2 (8)

Proper shipping name: Organic peroxide type D, liquid (Peroxyacetic acid, type D)

15. REGULATORY INFORMATION

OSHA Hazards

Combustible Liquid, Organic Peroxide, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Harmful by skin absorption., Corrosive, Carcinogen

DSL Status

All components of this product are on the Canadian DSL list.

SARA 302 Components

	CAS-No.	Revision Date
Hydrogen peroxide	7722-84-1	1989-12-01
peracetic acid ... %	79-21-0	1991-07-01

SARA 313 Components

	CAS-No.	Revision Date
peracetic acid ... %	79-21-0	1991-07-01

SARA 311/312 Hazards

Fire Hazard, Reactivity Hazard, Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

	CAS-No.	Revision Date
Acetic acid	64-19-7	1989-12-01
Hydrogen peroxide	7722-84-1	1989-12-01
peracetic acid ... %	79-21-0	1991-07-01

Pennsylvania Right To Know Components

	CAS-No.	Revision Date
Acetic acid	64-19-7	1989-12-01
Hydrogen peroxide	7722-84-1	1989-12-01
peracetic acid ... %	79-21-0	1991-07-01

New Jersey Right To Know Components

	CAS-No.	Revision Date
Acetic acid	64-19-7	1989-12-01
Hydrogen peroxide	7722-84-1	1989-12-01
peracetic acid ... %	79-21-0	1991-07-01

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

16. OTHER INFORMATION

Further information

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Co., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.