Guidechem Chemical Network - Chemical Manufacturers,suppliers, B2B Marketplace (guidechem.com)

# SIGMA-ALDRICH

## Material Safety Data Sheet

Version 3.1
Revision Date 02/16/2009
Print Date 07/27/2010

### 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
Telephone : +18003255832
Fax : +18003255052
Emergency Phone # : (314) 776-6555

### 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<br>25 mg/m3 | 1994-09-01 | USA. ACGIH Threshold Limit Values (TLV) |
| | | STEL | 15 ppm<br>37 mg/m3 | 1994-09-01 | USA. ACGIH Threshold Limit Values (TLV) |
| | | TWA | 10 ppm<br>25 mg/m3 | 1989-03-01 | USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000 |
| | | TWA | 10 ppm<br>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<br>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 lilkely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.<br>1996 Adoption<br>Refers to Appendix A -- Carcinogens. | | | | |
| | | TWA | 1 ppm<br>1.4 mg/m3 | 1989-03-01 | USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000 |
| | | TWA | 1 ppm<br>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 |

**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/cm3 |
| 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**
Copyright 2009 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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.