



# Safety Data Sheet

## Command



### Signal word

**Danger**

### Hazard statement(s)

H226 Flammable liquid and vapor  
H271 May cause fire or explosion; strong oxidizer  
H302 Harmful if swallowed  
H314 Causes severe skin burns and eye damage  
H318 Causes serious eye damage

### Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P220 Keep/Store away from clothing/.../combustible materials.  
P221 Take any precaution to avoid mixing with combustibles/...  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ventilating/lighting/.../ equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P260 Do not breathe dust/fume/gas/mist/vapors/spray.  
P264 Wash ... thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P280 Wear eye protection/face protection.  
P280 Wear protective gloves/eye protection/face protection.  
P283 Wear fire/flame resisitant/retardant clothing.  
P301+P312 IF SWALLOWED: Call a POISON CENTER /doctor/...if you feel unwell,  
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.  
P306+P360 IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.  
P310 Immediately call a POISON CENTER/doctor/...  
P321 Specific treatment (see ... on this label).  
P330 Rinse mouth.  
P363 Wash contaminated clothing before reuse.  
P370+P378 In case of fire: Use ... to extinguish.  
P371+P380+P375 In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.  
P403+P235 Store in a well-ventilated place. Keep cool.  
P405 Store locked up.  
P501 Dispose of contents/container to ...

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## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

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### Hazardous components

#### 1. Hydrogen peroxide

Concentration	Not specified
EC no.	231-765-0
CAS no.	7722-84-1
Index no.	008-003-00-9

- Oxidizing liquids, Cat. 1
- Skin corrosion/irritation, Cat. 1A
- Acute toxicity, inhalation, Cat. 4
- Acute toxicity, oral, Cat. 4

H271	May cause fire or explosion; strong oxidizer
H314	Causes severe skin burns and eye damage

#### 2. Acetic acid

Concentration	Not specified
EC no.	200-580-7
CAS no.	64-19-7
Index no.	607-002-00-6

- Flammable liquids, Cat. 3
- Skin corrosion/irritation, Cat. 1A

H226	Flammable liquid and vapor
H314	Causes severe skin burns and eye damage

#### 3. Peracetic acid

Concentration	Not specified
EC no.	201-186-8
CAS no.	79-21-0
Index no.	607-094-00-8

- Flammable liquids, Cat. 3
- Organic peroxides, Type D
- Acute toxicity, inhalation, Cat. 4
- Acute toxicity, dermal, Cat. 4
- Acute toxicity, oral, Cat. 4
- Skin corrosion/irritation, Cat. 1A
- Hazardous to the aquatic environment, short-term (acute), Cat. 1

H226	Flammable liquid and vapor
H242	Heating may cause a fire
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H332	Harmful if inhaled
H400	Very toxic to aquatic life

## **SECTION 4: First-aid measures**

### **4.1 Description of necessary first-aid measures**

General advice	Immediately remove any clothing soiled by the product.
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 immediately all contaminated clothing. Rinse skin with water/shower for at least 15 minutes. Call a poison center or doctor if irritation develops or persists. Wash contaminated clothing before reuse.  Acute and delayed symptoms and effects: Causes severe skin burns.
In case of eye contact	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.
Personal protective equipment for first-aid responders	No further relevant information available.

### **4.2 Most important symptoms/effects, acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### **4.3 Indication of immediate medical attention and special treatment needed, if necessary**

No further relevant information available.

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## **SECTION 5: Fire-fighting measures**

### **5.1 Suitable extinguishing media**

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

### **5.2 Specific hazards arising from the chemical**

Non combustible. May give off irritating or toxic fumes (or gases) in a fire.

### **5.3 Special protective actions for fire-fighters**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus.

#### **Further information**

May intensify fire; oxidiser.

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## **SECTION 6: Accidental release measures**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation. Use personal protective equipment. For personal protection see section 8.

### **6.2 Environmental precautions**

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

### 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel). Keep in suitable, closed containers for disposal.

#### Reference to other sections

See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Ensure adequate ventilation. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated place away from direct sunlight. Keep container closed when not in use.

#### Specific end use(s)

No further relevant information available.

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### 1. Hydrogen peroxide (CAS: 7722-84-1)

PEL (Inhalation): 1 ppm; USA (OSHA)

OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

PEL (Inhalation): 1.4 mg/m<sup>3</sup>; USA (OSHA)

OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

PEL (Inhalation): 1 ppm; USA (Cal/OSHA)

OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

REL (Inhalation): 1 ppm; USA (NIOSH)

OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

TLV® (Inhalation): 1 ppm; USA (ACGIH)

OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

#### 2. Acetic acid (CAS: 64-19-7 EC: 200-580-7)

PEL (Inhalation): 25 mg/m<sup>3</sup>; USA (OSHA)

OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

PEL (Inhalation): 10 ppm; USA (OSHA)

OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

PEL (Inhalation): 10 ppm, (ST) 15 ppm, (C) 40 ppm; USA (Cal/OSHA)

OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

REL (Inhalation): 10 ppm, (ST) 15 ppm; USA (NIOSH)

OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

TLV® (Inhalation): 10 ppm, (ST) 15 ppm; USA (ACGIH)

OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

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TWA (Inhalation): 10 ppm; USA (ACGIH)  
USA. ACGIH Threshold Limit Values (TLV)/ Pulmonary function

STEL (Inhalation): 15 ppm; USA (ACGIH)  
USA. ACGIH Threshold Limit Values (TLV)/Pulmonary function.Upper Respiratory Tract irritation. Eye irritation

ST (Inhalation): 15 ppm  
37 mg/m<sup>3</sup>; USA (NIOSH)  
USA. NIOSH Recommended  
Exposure Limits/ Can be found in concentrations of 5-8% in vinegar

TWA (Inhalation): 10 ppm  
25 mg/m<sup>3</sup>; USA (NIOSH)  
USA. NIOSH Recommended  
Exposure Limits/ Can be found in concentrations of 5-8% in vinegar

TWA (Inhalation): 10 ppm  
25 mg/m<sup>3</sup>; USA (OSHA)  
USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants

PEL (Inhalation): 10 ppm  
25 mg/m<sup>3</sup>; USA (Cal/OSHA)  
California permissible exposure limits for chemical contaminants  
(Title 8, Article 107)

STEL (Inhalation): 15 ppm  
37 mg/m<sup>3</sup>; USA (Cal/OSHA)  
California permissible exposure limits for chemical contaminants  
(Title 8, Article 107)

C (Inhalation): 40 ppm; USA (Cal/OSHA)  
California permissible exposure limits for chemical contaminants  
(Title 8, Article 107)

### 8.2 Appropriate engineering controls

Forced air, local exhaust, or open air is adequate.

### 8.3 Individual protection measures, such as personal protective equipment (PPE)

#### Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Wear chemical resistant gloves and chemical resistant garments when handling, wash garments before re-use.

#### Body protection

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

In case of brief exposure or low pollution, use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

#### Environmental exposure controls

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

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### SECTION 9: Physical and chemical properties

#### Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	Clear colorless liquid
Odor	Vinegar odor
Odor threshold	Not determined
pH	<1 (1:10)
Melting point/freezing point	No information available
Initial boiling point and boiling range	No information available
Flash point	>200 F (93 C)
Evaporation rate	No information available
Flammability (solid, gas)	Non flammable
Upper/lower flammability limits	No information available
Upper/lower explosive limits	No information available
Vapor pressure	(mm Hg): 22
Vapor density	No information available
Relative density	No information available
Solubility(ies)	
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature	>518 F (>270 C)
Decomposition temperature	No information available
Viscosity	5-15 cSt at 20 C (68 F)
Explosive properties	
Oxidizing properties	Oxidizer

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### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

Reactive with bases, metals, reducing agents and combustible materials.

#### 10.2 Chemical stability

Stable up to 1 year when stored under normal conditions.

#### 10.3 Possibility of hazardous reactions

May react with incompatible materials.

#### 10.4 Conditions to avoid

Incompatible materials and high temperatures.

#### 10.5 Incompatible materials

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Hydrogen peroxide: Zinc, Powdered metals, Iron, Copper, Nickel, Brass, Iron and iron salts.

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Acetic acid: Oxidizing agents, Soluble carbonates and phosphates, Hydroxides, Metals, Peroxides, permanganates, e.g. potassium permanganate, Amines, Alcohols, Nitric acid

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### 10.6 Hazardous decomposition products

Oxygen which supports combustion.

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Hydrogen peroxide: Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known.

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Acetic acid: Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

In the event of fire: see section 5

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## SECTION 11: Toxicological information

### Information on toxicological effects

#### Acute toxicity

Information on likely routes of exposure:

Routes of entry-inhalation: Yes

Routes of entry-skin and eye: Yes

Routes of entry-ingestion: Yes

Routes of entry-skin absorption: No

#### Skin corrosion/irritation

Causes severe skin burns.

Corrosive. Contact with skin causes irritation or severe burns and scarring with greater exposure.

#### Serious eye damage/irritation

Causes serious eye irritation, and with greater exposures can cause burns that may result in permanent impairment of vision, even blindness.

#### Respiratory or skin sensitization

Inhalation of the mist may produce severe irritation of respiratory tract, characterized by coughing, choking, shortness of breath, headaches, dizziness, nausea, weakness and/or drowsiness.

#### Germ cell mutagenicity

No data available

#### Carcinogenicity

No data available

#### Reproductive toxicity

No data available

#### Summary of evaluation of the CMR properties

Carcinogenic categories: IARC (International Agency for Research on Cancer), NTP (National Toxicology Program), OSHA-Ca (Occupational Safety and Health Administration): None of the ingredients listed.

#### STOT-single exposure

No data available

#### STOT-repeated exposure

No data available

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### Aspiration hazard

No data available

### Additional information

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

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## SECTION 12: Ecological information

### Toxicity

May be harmful to aquatic life.

### Persistence and degradability

Not expected to persist. Expected to readily biodegrade.

### Bioaccumulative potential

Not expected to bioaccumulate.

### Mobility in soil

No further relevant information available.

### Results of PBT and vPvB assessment

No further relevant information available.

### Other adverse effects

No further relevant data available.

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## SECTION 13: Disposal considerations

### Disposal of the product

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

### Disposal of contaminated packaging

Disposal must be made according to official regulations.

### Waste treatment

Disposal must be made according to official regulations.

### Sewage disposal

Disposal must be made according to official regulations.

### Other disposal recommendations

Disposal must be made according to official regulations.

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## SECTION 14: Transport information

### DOT (US)

UN Number: UN 3098

Class: 5.1 (8)

Packing Group: II

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Proper Shipping Name: Oxidizing Liquid, Corrosive, N.O.S. (Contains Hydrogen Peroxide and Peroxyacetic Acid Mixture, Stabilized)  
Reportable quantity (RQ): NA  
Marine pollutant: No  
Poison inhalation hazard:

### IMDG

UN Number: UN 3098  
Class: 5.1 (8)  
Packing Group: II  
EMS Number:  
Proper Shipping Name: Oxidizing Liquid, Corrosive, N.O.S. (Contains Hydrogen Peroxide and Peroxyacetic Acid Mixture, Stabilized)

### IATA

UN Number: UN 3098  
Class: 5.1 (8)  
Packing Group: II  
Proper Shipping Name: Oxidizing Liquid, Corrosive, N.O.S. (Contains Hydrogen Peroxide and Peroxyacetic Acid Mixture, Stabilized)

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## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations specific for the product in question

#### New Jersey Right To Know Components

Water  
CAS-number: 7732-18-5  
Hydrogen peroxide  
CAS number: 7722-84-1

#### Pennsylvania Right To Know Components

Water  
CAS-number: 7732-18-5  
Hydrogen peroxide  
CAS number: 7722-84-1

#### SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### SARA 302 Components

The following components are subject to reporting levels established by SARA Title III, Section 302:  
Hydrogen peroxide  
CAS-Number: 7722-84-1

#### SARA 311/312 Hazards

Reactivity Hazard, Acute Health Hazard, Chronic Health Hazard

#### Massachusetts Right To Know Components

Hydrogen peroxide

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CAS number: 7722-84-1

### California Prop. 65 Components

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

### Massachusetts Right To Know Components

Acetic acid

CAS number: 64-19-7

### New Jersey Right To Know Components

Acetic acid

CAS number: 64-19-7

### Pennsylvania Right To Know Components

Acetic acid

CAS number: 64-19-7

### SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

### Massachusetts Right To Know Components

Chemical name: Ethaneperoxoic acid

CAS number: 79-21-0

### New Jersey Right To Know Components

Common name: Peroxyacetic acid

CAS number: 79-21-0

### Pennsylvania Right To Know Components

Chemical name: Ethaneperoxoic acid

CAS number: 79-21-0

## 15.2 Chemical Safety Assessment

Keep out of reach of children. Read label before use. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required.

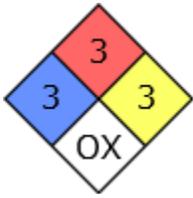
### HMIS Rating

Command	
HEALTH	4
FLAMMABILITY	3
PHYSICAL HAZARD	3
PERSONAL PROTECTION	

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### NFPA Rating



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## SECTION 16: Other information

### 16.1 Further information/disclaimer

DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of information for their particular purposes. In no event shall BouMatic be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, whatsoever arising, even if BouMatic has been advised of the possibility of such damages.

### 16.2 Preparation information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.