

1 Identification

- **Product identifier:** Peroxyacetic acid
- **Synonyms:** Peracetic acid, Ethanperoxoic acid, PAA
- **Trade name:** Pearl OX-18™
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Seeler Industries, Inc.
1 Genstar Drive
Joliet, IL 60441
- **Additional Information:** 815-740-2640
- **Emergency telephone number:** CHEMTREC: 800-424-9300

2 Hazard(s) identification

- **Classification of the substance or mixture**



Flame over circle

Ox. Liq. 1 H271 May cause fire or explosion; strong oxidizer.



Corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H312 Harmful in contact with skin.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Corrosive

Causes severe burns.



Harmful

Harmful by inhalation, in contact with skin and if swallowed.



Irritant

Irritating to respiratory system.



Oxidizing

May cause fire.

(Contd. of page 1)

- **Information concerning particular hazards for human and environment:**

The product has to be labeled due to the calculation procedure of international guidelines.

- **Classification system:**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- **Label elements**

- **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with directives on hazardous materials.

- **Code letter and hazard designation of product:**



Corrosive
Oxidizing

Signal Word: DANGER

- **Hazard-determining components of labeling:**

peroxyacetic acid

acetic acid

hydrogen peroxide solution

- **Risk phrases:**

May cause fire.

Harmful by inhalation, in contact with skin and if swallowed.

Causes severe burns.

Irritating to respiratory system.

- **Safety phrases:**

Keep locked up and out of the reach of children.

Keep only in the original container in a cool, well-ventilated place away from alkaline solutions.

In case of contact with eyes, rinse immediately with running water for at least 15 minutes. Get medical attention.

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

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Dispose of this material and its container to hazardous or special waste collection point.

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 3

Fire = 1

Reactivity = 2

The substance possesses oxidizing properties.

- **HMIS-ratings (scale 0 - 4)**



Health = 3

Fire = 1

Reactivity = 2

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

(Contd. on page 3)

· **vPvB:** Not applicable.

(Contd. of page 2)

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

64-19-7	acetic acid	40 - 59 %
79-21-0	peroxyacetic acid	18 - 20 %
7722-84-1	hydrogen peroxide solution	5 - 7 %

4 First-aid measures

- **Description of first aid measures**
- **General information:**
Take affected persons out into the fresh air.
Immediately remove any clothing soiled by the product.
- **After inhalation:**
Remove to fresh air. If symptoms persist consult a doctor.
In case of unconsciousness, immediately seek medical attention.
- **After skin contact:**
Remove contaminated clothing and flush area with running water for a minimum of 15 minutes. If irritation persists consult a doctor.
- **After eye contact:**
Immediately flush open eye with running water for a minimum of 15 minutes. Immediately get medical attention.
- **After swallowing:**
Immediately contact a doctor or Poison Control Center.
Immediately drink large quantities of milk, milk of magnesia, egg whites or gelatin solution. If these are not available, drink large quantities of water. Do not induce vomiting. Never give anything by mouth to an unconscious person.
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.

(Contd. on page 4)

(Contd. of page 3)

- **Environmental precautions:**
Do not allow to enter surface or ground water.
Do not allow to penetrate the ground/soil.
Dilute with plenty of water.
- **Methods and material for containment and cleaning up:**
Dike with inert materials.
Absorb with sand or other non-combustible material.
Use neutralizing agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **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.

7 Handling and storage

- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Do not store in direct sunlight.
Store in a cool, dry, well ventilated area.
- **Information about storage in one common storage facility:**
Store away from flammable substances.
Store away from reducing agents.
- **Further information about storage conditions:**
For quality purposes, avoid temperatures in excess of 86 degrees F. Elevated temperatures will accelerate decomposition resulting in a loss of assay.
Shelf life: 6 months at ideal storage conditions
Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

Components with limit values that require monitoring at the workplace:

64-19-7 acetic acid

PEL	Long-term value: 25 mg/m ³ , 10 ppm
REL	Short-term value: 37 mg/m ³ , 15 ppm Long-term value: 25 mg/m ³ , 10 ppm
TLV	Short-term value: 37 mg/m ³ , 15 ppm Long-term value: 25 mg/m ³ , 10 ppm

(Contd. on page 5)

(Contd. of page 4)

79-21-0 peroxyacetic acid

TLV	Short-term value: 1.24* mg/m ³ , 0.4* ppm *inhalable fraction + vapor
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7722-84-1 hydrogen peroxide solution

PEL	Long-term value: 1.4 mg/m ³ , 1 ppm
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REL	Long-term value: 1.4 mg/m ³ , 1 ppm
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TLV	Long-term value: 1.4 mg/m ³ , 1 ppm
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- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- **Breathing equipment:**

Not necessary if room is well-ventilated.

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.

- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

- **Body protection:** Apron

(Contd. on page 6)

(Contd. of page 5)

9 Physical and Chemical Properties

- Information on basic physical and chemical properties

- General Information

- Appearance:

Form:	Liquid
Color:	Colorless
Odor:	Characteristic
Odor threshold:	Not determined.

- pH-value at 20 °C (68 °F): < 2

- Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.

- Flash point: Not applicable.

- Flammability (solid, gaseous): Not applicable.

- Ignition temperature:

Decomposition temperature: Not determined.

- Auto igniting: Product is not selfigniting.

- Danger of explosion: Not determined.

- Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

- Vapor pressure: Not determined.

Density at 20 °C (68 °F):	1.116 g/cm ³
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.

- Solubility in / Miscibility with Water: Fully miscible.

- Partition coefficient (n-octanol/water): Not determined.

- Viscosity:

Dynamic:	Not determined.
Kinematic:	Not determined.

- Solvent content:

VOC content: 509.7 g/l / 4.25 lb/gal

- Other information: No further relevant information available.

10 Stability and reactivity

- Reactivity

- Chemical stability

Stability decreases with concentration, heat, light exposure, decrease in pH and contamination with heavy metals such as nickel, cobalt, copper, and iron.

- Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

(Contd. on page 7)

(Contd. of page 6)

- **Possibility of hazardous reactions**

Acts as an oxidizing agent on organic materials such as wood, paper and fats.

Reacts with reducing agents.

Reacts with strong alkali.

- **Conditions to avoid**

Open Flames, elevated temperatures, any source of heat, combustibles such as paper and wood, and contamination. Temperatures above 86 degrees F will decrease shelf life of product and accelerate decomposition resulting in a loss of assay.

- **Incompatible materials:**

reducing agents, oxidizing agents, organics, heavy metals such as iron, copper, chromium, nickel, aluminum, and cobalt.

Alkali (Caustic)

- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

64-19-7 acetic acid

Oral	LD50	3310 mg/kg (rat)
Dermal	LD50	1060 mg/kg (rabbit)

- **Primary irritant effect:**

- **on the skin:** Strong caustic effect on skin and mucous membranes.

- **on the eye:** Strong caustic effect.

- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

7722-84-1	hydrogen peroxide solution	3
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- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability** No further relevant information available.

- **Bioaccumulative potential** No further relevant information available.

- **Mobility in soil** No further relevant information available.

(Contd. on page 8)

(Contd. of page 7)

- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Must not reach bodies of water or drainage ditch undiluted or unneutralized.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Dispose of in accordance with federal, state, and local regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· UN-Number	
· DOT, IMDG, IATA	UN3109
· UN proper shipping name	
· DOT, IMDG, IATA	Organic peroxide type F, liquid
· Transport hazard class(es)	
· DOT	
· Class	5.2 Organic peroxides
· Packing group	
· DOT	None
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· DOT	
· Quantity limitations	On passenger aircraft/rail: 10 L On cargo aircraft only: 25 L
· IMDG	
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity

(Contd. on page 9)

(Contd. of page 8)

- **UN "Model Regulation":** UN3109, ORGANIC PEROXIDE TYPE F, STABILIZED, LIQUID, 5.2,(CONTAINS PEROXYACETIC ACID ≤ 36% WITH NOT MORE THAN 7% HYDROGEN PEROXIDE)

15 Regulatory information

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

- **Section 355 (extremely hazardous substances):**

79-21-0	peroxyacetic acid
7722-84-1	hydrogen peroxide solution

- **Section 313 (Specific toxic chemical listings):**

79-21-0	peroxyacetic acid
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- **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**

7722-84-1	hydrogen peroxide solution	A3
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- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

- **Hazard symbols:**



Corrosive
Oxidizing

- **Hazard-determining components of labeling:**

peroxyacetic acid
acetic acid
hydrogen peroxide solution

(Contd. on page 10)

(Contd. of page 9)

· Risk phrases:

May cause fire.
Harmful by inhalation, in contact with skin and if swallowed.
Causes severe burns.
Irritating to respiratory system.

· Safety phrases:

Keep locked up and out of the reach of children.
Keep only in the original container in a cool, well-ventilated place away from alkaline solutions.
In case of contact with eyes, rinse immediately with running water for at least 15 minutes. Get medical attention.
Wear suitable protective clothing, gloves and eye/face protection.
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Dispose of this material and its container to hazardous or special waste collection point.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

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