

Safety Data Sheet
acc. to OSHA HCS

Printing date 02/06/2023

Reviewed on 02/06/2023

1 Identification

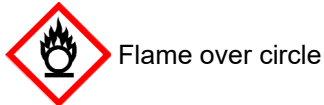
- **Product identifier**
- **Trade name: MICROTOX PRIME**
- **Article number: LPA35A**
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
ZEE COMPANY, INC.
4146 South Creek Road
Chattanooga, TN 37406
- **Information department:** Technical Services: 423-698-1401
- **Emergency telephone number:** CHEMTREC: 800-424-9300

2 Hazard(s) identification

- **Classification of the substance or mixture**



Organic Peroxides - Type F H242 Heating may cause a fire.



Oxidizing Liquids 1 H271 May cause fire or explosion; strong oxidizer.



Skin Corrosion 1A H314 Causes severe skin burns and eye damage.
Eye Damage 1 H318 Causes serious eye damage.



Acute Toxicity - Oral 4 H302 Harmful if swallowed.
Acute Toxicity - Dermal 4 H312 Harmful in contact with skin.
Acute Toxicity - Inhalation 4 H332 Harmful if inhaled.
Flammable Liquids 4 H227 Combustible liquid.

- **Label elements**
- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

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- **Hazard pictograms**



- **Signal word** Danger

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

peroxyacetic acid
acetic acid
hydrogen peroxide solution

- **Hazard statements**

Combustible liquid.
May cause fire or explosion; strong oxidizer.
Heating may cause a fire.
Harmful if swallowed, in contact with skin or if inhaled.
Causes severe skin burns and eye damage.

- **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Keep/Store away from clothing/combustible materials.
Take any precaution to avoid mixing with combustibles.
Keep only in original container.
Do not breathe dusts or mists.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
Wear fire/flame resistant/retardant clothing.
If swallowed: Call a poison center/doctor if you feel unwell.
If swallowed: Rinse mouth. Do NOT induce vomiting.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a poison center/doctor.
If on clothing: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
Specific treatment (see on this label).
Take off contaminated clothing and wash it before reuse.
Wash contaminated clothing before reuse.
In case of fire: Use CO₂, powder or water spray to extinguish.
In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
Store in a well-ventilated place. Keep cool.
Store locked up.
Protect from sunlight.
Store at temperatures not exceeding 86°F. Keep cool.
Store away from other materials.
Dispose of contents/container in accordance with local/regional/national/international regulations.

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- **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.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

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

- **Dangerous components:**

79-21-0	peroxyacetic acid	25-35%
64-19-7	acetic acid	15-25%
7722-84-1	hydrogen peroxide solution	10-15%

4 First-aid measures

- **Description of first aid measures**
- **General information:**
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Immediately call a doctor.
Drink copious amounts of water and provide fresh air. Immediately call a doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.

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- **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**
During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
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.
- **Protective Action Criteria for Chemicals**

- **PAC-1:**

79-21-0	peroxyacetic acid	0.52 mg/m ³
64-19-7	acetic acid	5 ppm
7722-84-1	hydrogen peroxide solution	10 ppm

- **PAC-2:**

79-21-0	peroxyacetic acid	1.6 mg/m ³
64-19-7	acetic acid	35 ppm
7722-84-1	hydrogen peroxide solution	50 ppm

- **PAC-3:**

79-21-0	peroxyacetic acid	15 mg/m ³
64-19-7	acetic acid	250 ppm
7722-84-1	hydrogen peroxide solution	100 ppm

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7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **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:

79-21-0 peroxyacetic acid

TLV	Short-term value: 0.4* ppm *inhalable fraction + vapor, A4
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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: 15 ppm Long-term value: 10 ppm

7722-84-1 hydrogen peroxide solution

PEL	Long-term value: 1.4 mg/m ³ , 1 ppm
REL	Long-term value: 1.4 mg/m ³ , 1 ppm
TLV	Long-term value: 1 ppm A3

- **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.
Avoid contact with the eyes and skin.

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- **Breathing equipment:**
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

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):** <1

- **Change in condition**

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

- **Flash point:** >55 °C (>131 °F)

- **Flammability (solid, gaseous):** Not applicable.

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Product is not selfigniting.

- **Danger of explosion:** Explosive when mixed with combustible material.

- **Explosion limits:**

· Lower:	100 g/m ³
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Upper:	430 g/m ³
· Vapor pressure at 40 °C (104 °F):	<10 mm Hg
· Density at 20 °C (68 °F):	1.17 g/cm ³ (9.76365 lbs/gal)
· 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:	
Organic solvents:	25.0 %
VOC content:	25.00 %
	292.5 g/l / 2.44 lb/gal
Solids content:	0.0 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
Stability decreases with concentration, heat, light exposure, and contamination with metals such as nickel, cobalt, copper, zinc, and iron.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **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, and metals such as iron, copper, chromium, nickel, aluminum, zinc, and cobalt
Alkali (Caustic)
- **Hazardous decomposition products:** No dangerous decomposition products known.

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11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

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

64-19-7 acetic acid

Oral	LD50	3,310 mg/kg (rat)
Dermal	LD50	1,060 mg/kg (rabbit)

- **Primary irritant effect:**

- **on the skin:** Caustic effect on skin and mucous membranes.

- **on the eye:**

Strong caustic effect.

Strong irritant with the danger of severe eye injury.

- **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:**

a. Aquatic Toxicity Freshwater fish, 96 hr LC50 = > 100 mg/l (estimated)

Daphnia magna, 48 hr EC50 = > 100 mg/l (estimated)

Acute aquatic toxicity will result from oxygen depletion caused by sulfite ingredient. Prevent spills from entering natural waterways and sewer systems.

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

- **Behavior in environmental systems:**

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

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

- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably

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increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

- **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:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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

ORGANIC PEROXIDE TYPE F, LIQUID

- **Transport hazard class(es)**

- **DOT**



- **Class**

5.2 Organic peroxides

- **Label**

5.2

- **Class**

5.2 Organic peroxides

- **Label**

5.2

- **IMDG, IATA**



- **Class**

5.2 Organic peroxides

- **Label**

5.2

- **Packing group**

None

- **DOT, IMDG, IATA**

-

- **Environmental hazards:**

Product contains environmentally hazardous substances: peroxyacetic acid

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· Special precautions for user	Warning: Organic peroxides
· Hazard identification number (Kemler code):	539
· EMS Number:	F-J,S-R
· Stowage Category	D
· Stowage Code	SW1 Protected from sources of heat.
· Segregation Code	SG35 Stow "separated from" SGG1-acids SG36 Stow "separated from" SGG18-alkalis. SG72 See 7.2.6.3.2.

· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
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· **Transport/Additional information:**

· DOT	
· Quantity limitations	On passenger aircraft/rail: 10 L On cargo aircraft only: 25 L

· UN "Model Regulation":	UN 3109 ORGANIC PEROXIDE TYPE F, LIQUID, 5.2
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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
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7722-84-1	hydrogen peroxide solution
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· **Section 313 (Specific toxic chemical listings):**

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

All components have the value ACTIVE.

· **Hazardous Air Pollutants**

None of the ingredients is 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)**

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

None of the ingredients is listed.

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms

· Signal word Danger

· Hazard-determining components of labeling:

peroxyacetic acid
acetic acid
hydrogen peroxide solution

· Hazard statements

Combustible liquid.
May cause fire or explosion; strong oxidizer.
Heating may cause a fire.
Harmful if swallowed, in contact with skin or if inhaled.
Causes severe skin burns and eye damage.

· Precautionary statements

Keep out of reach of children.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Keep/Store away from clothing/combustible materials.
Take any precaution to avoid mixing with combustibles.
Keep only in original container.
Do not breathe dusts or mists.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
Wear fire/flame resistant/retardant clothing.
If swallowed: Call a poison center/doctor if you feel unwell.
If swallowed: Rinse mouth. Do NOT induce vomiting.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a poison center/doctor.
If on clothing: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
Specific treatment (see on this label).
Take off contaminated clothing and wash it before reuse.
Wash contaminated clothing before reuse.
In case of fire: Use CO₂, powder or water spray to extinguish.
In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
Store in a well-ventilated place. Keep cool.
Store locked up.
Protect from sunlight.
Store at temperatures not exceeding 86°F. Keep cool.
Store away from other materials.

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

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

16 Other 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.

- **Contact:** Jim Faller/Ben Pesigan
- **Date of preparation / last revision** 02/06/2023 / 14
- **Abbreviations and acronyms:**
 - IMDG: International Maritime Code for Dangerous Goods
 - DOT: US Department of Transportation
 - IATA: International Air Transport Association
 - EINECS: European Inventory of Existing Commercial Chemical Substances
 - ELINCS: European List of Notified Chemical Substances
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - NFPA: National Fire Protection Association (USA)
 - HMIS: Hazardous Materials Identification System (USA)
 - VOC: Volatile Organic Compounds (USA, EU)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
 - PBT: Persistent, Bioaccumulative and Toxic
 - vPvB: very Persistent and very Bioaccumulative
 - NIOSH: National Institute for Occupational Safety
 - OSHA: Occupational Safety & Health
 - TLV: Threshold Limit Value
 - PEL: Permissible Exposure Limit
 - REL: Recommended Exposure Limit
 - Flammable Liquids 4: Flammable liquids – Category 4
 - Oxidizing Liquids 1: Oxidizing liquids – Category 1
 - Organic Peroxides - Type F: Organic peroxides – Type E/F
 - Acute Toxicity - Oral 4: Acute toxicity – Category 4
 - Skin Corrosion 1A: Skin corrosion/irritation – Category 1A
 - Eye Damage 1: Serious eye damage/eye irritation – Category 1
- *** Data compared to the previous version altered.**

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