

# Material Safety Data Sheet



Apple Pectin Acid pH Perm With Apple Cider Neutralizer - Neutralizer

## 1. Product and company identification

|                                 |   |
|---------------------------------|---|
| <b>Product name</b>             | : Apple Pectin Acid pH Perm With Apple Cider Neutralizer - Neutralizer                |
| <b>Manufacturer</b>             | : Zotos International, INC<br>100 Tokeneke Road,<br>Darien, CT 06820<br>www.zotos.com |
| <b>Validation date</b>          | : 8/14/2012.  |
| <b>In case of emergency</b>     | : (800) 584-8038 [24 Hours]   |
| <b>Telephone number</b>         | : (203) 656-7859 [8:30 a.m. - 5:00 p.m.]  |
| <b>Transportation Emergency</b> | : Contact: CHEMTREC 1-800-424-9300 [US/Canada 24 Hours]                               |
| <b>Product type</b>             | : Liquid.   |

## 2. Hazards identification

### Emergency overview

NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.

|   |  |
|---|--|
| <b>Color</b>  | : Off-white.   |
| <b>Odor</b>   | : Fragrant.  |
| <b>Hazard statements</b>                              | : CAUSES EYE IRRITATION.   |
| <b>Precautionary measures</b>                         | : Do not breathe vapor or mist. Do not eat, drink or smoke when using this product. Avoid contact with eyes. Wash thoroughly after handling. |
| <b>OSHA/HCS status</b>                                | : None.  |
| <b>Potential acute health effects</b>                 |  |
| <b>Inhalation</b>                                     | : None known.  |
| <b>Ingestion</b>                                      | : Mild irritant  |
| <b>Skin</b>   | : Prolonged exposure may result in skin burns and ulcerations.   |
| <b>Eyes</b>   | : Prolonged or repeated contact with skin or mucous membrane may result in irritation symptoms, such as redness, blistering, dermatitis etc. |
| <b>Potential chronic health effects</b>               |  |
| <b>Chronic effects</b>                                | : Contains material that may cause target organ damage, based on animal data.  |
| <b>Carcinogenicity</b>                                | : No known significant effects or critical hazards.  |
| <b>Mutagenicity</b>                                   | : No known significant effects or critical hazards.  |
| <b>Teratogenicity</b>                                 | : No known significant effects or critical hazards.  |
| <b>Developmental effects</b>                          | : No known significant effects or critical hazards.  |
| <b>Fertility effects</b>                              | : No known significant effects or critical hazards.  |
| <b>Over-exposure signs/symptoms</b>                   | : None identified.   |
| <b>Medical conditions aggravated by over-exposure</b> | : None.  |

See toxicological information (Section 11)

### 3. Composition/information on ingredients

United States

| Name              | CAS number | %    |
|-------------------|------------|------|
| hydrogen peroxide | 7722-84-1  | 2.45 |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

### 4. First aid measures

- Eye contact** : Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention if you feel unwell.
- Skin contact** : Wash the contaminated skin gently and thoroughly with running water and non-abrasive soap.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if you feel unwell.
- Ingestion** : Call physician immediately.
- Protection of first-aiders** : Use suitable protective equipment (section 8).
- Notes to physician** : Treat symptomatically.

### 5. Fire-fighting measures

- Flammability of the product** : None.
- Extinguishing media** : Extinguish fire using an agent suitable for the surrounding fire.
- Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Hazardous thermal decomposition products** : No specific data.
- Special protective equipment for fire-fighters** : In a fire, decomposition may produce toxic gases/fumes. Wear suitable protective clothing.

### 6. Accidental release measures

- Personal precautions** : Rubber gloves.
- Environmental precautions** : Store in a cool, well-ventilated, dry place. NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.
- Methods for cleaning up** : Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Place spilled material in an appropriate container for disposal. After contact with skin, wash immediately with plenty of water.

### 7. Handling and storage

- Handling** : Avoid contact with skin and eyes. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10).
- Storage** : Store in a cool, well-ventilated, dry place. Store in a dry place at low temperature away from ignition and heat sources. Avoid increased storage temperature.

### 8. Exposure controls/personal protection

United States

| Ingredient | Exposure limits |
|------------|-----------------|
|            |                 |

## 8. Exposure controls/personal protection

|                   |  |
|-------------------|--|
| hydrogen peroxide | <p><b>ACGIH TLV (United States, 2/2010).</b><br/>                     TWA: 1 ppm 8 hour(s).<br/>                     TWA: 1.4 mg/m<sup>3</sup> 8 hour(s).</p> <p><b>OSHA PEL 1989 (United States, 3/1989).</b><br/>                     TWA: 1 ppm 8 hour(s).<br/>                     TWA: 1.4 mg/m<sup>3</sup> 8 hour(s).</p> <p><b>NIOSH REL (United States, 6/2009).</b><br/>                     TWA: 1 ppm 10 hour(s).<br/>                     TWA: 1.4 mg/m<sup>3</sup> 10 hour(s).</p> <p><b>OSHA PEL (United States, 6/2010).</b><br/>                     TWA: 1 ppm 8 hour(s).<br/>                     TWA: 1.4 mg/m<sup>3</sup> 8 hour(s).</p> |
|-------------------|--|

### Canada

#### Occupational exposure limits

No exposure limit value known.

### Mexico

#### Occupational exposure limits

No exposure limit value known.

#### Consult local authorities for acceptable exposure limits.

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

**Engineering measures** : In case of insufficient ventilation, wear suitable respiratory equipment.

**Hygiene measures** : When using do not eat, drink or smoke.

#### Personal protection

**Respiratory** : In case of insufficient ventilation, wear suitable respiratory equipment.

**Hands** : None.

**Eyes** : None.

**Skin** : Wear suitable protective clothing.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Other protection** : Not available.

## 9. Physical and chemical properties

|                                   |                               |
|-----------------------------------|-------------------------------|
| <b>Physical state</b>             | : Liquid. [Viscous liquid.]   |
| <b>Flash point</b>                | : Closed cup: Not applicable. |
| <b>Color</b>                      | : Off-white.                  |
| <b>Odor</b>                       | : Fragrant.                   |
| <b>pH</b>                         | : 3 to 4                      |
| <b>Boiling/condensation point</b> | : >100°C (>212°F)             |
| <b>Relative density</b>           | : 1.004 to 1.01               |

## 10. Stability and reactivity

- Chemical stability** : Not available.  
**Conditions to avoid** : Not available.  
**Incompatible materials** : Reducing agents metals  
**Hazardous decomposition products** : Contaminated product generates oxygen gas pressure build-up  
**Possibility of hazardous reactions** : Not available.  
**Hazardous polymerization** : Not available.

## 11. Toxicological information

### United States

#### Acute toxicity

**Conclusion/Summary** : Not available.

#### Chronic toxicity

**Conclusion/Summary** : Not available.

#### Irritation/Corrosion

| Product/ingredient name | Result                 | Score | Exposure     | Observation |
|-------------------------|------------------------|-------|--------------|-------------|
| hydrogen peroxide       | Eyes - Severe irritant | -     | 1 milligrams | -           |

**Conclusion/Summary** : Not available.

#### Sensitizer

**Conclusion/Summary** : Not available.

#### Carcinogenicity

**Conclusion/Summary** : No carcinogenic effect.

#### Classification

| Product/ingredient name | ACGIH | IARC | EPA | NIOSH | NTP | OSHA |
|-------------------------|-------|------|-----|-------|-----|------|
| hydrogen peroxide       | A3    | 3    | -   | -     | -   | -    |

#### Mutagenicity

**Conclusion/Summary** : Not available.

#### Teratogenicity

**Conclusion/Summary** : Not available.

#### Reproductive toxicity

**Conclusion/Summary** : Not available.

### Canada

#### Acute toxicity

**Conclusion/Summary** : Not available.

#### Chronic toxicity

**Conclusion/Summary** : Not available.

#### Irritation/Corrosion

**Conclusion/Summary** : Not available.

#### Sensitizer

**Conclusion/Summary** : Not available.

#### Carcinogenicity

**Conclusion/Summary** : Not available.

#### Classification

| Product/ingredient name | ACGIH | IARC | EPA | NIOSH | NTP | OSHA |
|-------------------------|-------|------|-----|-------|-----|------|
| hydrogen peroxide       | A3    | 3    | -   | -     | -   | -    |

## 11. Toxicological information

### Mutagenicity

Conclusion/Summary : Not available.

### Teratogenicity

Conclusion/Summary : Not available.

### Reproductive toxicity

Conclusion/Summary : Not available.

### Mexico

#### Acute toxicity

Conclusion/Summary : Not available.

#### Chronic toxicity

Conclusion/Summary : Not available.

#### Irritation/Corrosion

Conclusion/Summary : Not available.

#### Sensitizer

Conclusion/Summary : Not available.

#### Carcinogenicity

Conclusion/Summary : Not available.

#### Classification

| Product/ingredient name | ACGIH | IARC | EPA | NIOSH | NTP | OSHA |
|-------------------------|-------|------|-----|-------|-----|------|
| hydrogen peroxide       | A3    | 3    | -   | -     | -   | -    |

### Mutagenicity

Conclusion/Summary : Not available.

### Teratogenicity

Conclusion/Summary : Not available.

### Reproductive toxicity

Conclusion/Summary : Not available.

## 12. Ecological information

THE FOLLOWING DATA IN THIS SECTION IS SOURCED FROM PUBLICLY AVAILABLE DATABASES AND NOT THE REPRESENTATION OF ANY DATA COLLECTED BY ZOTOS INTERNATIONAL OR ITS AFFILIATES.

Ecotoxicity : No known significant effects or critical hazards.

### United States

#### Aquatic ecotoxicity

| Product/ingredient name | Result                           | Species  | Exposure |
|-------------------------|----------------------------------|--|----------|
| hydrogen peroxide       | Acute EC50 1.2 mg/L Marine water | Algae - Dunaliella tertiolecta - Exponential growth phase              | 72 hours |
|                         | Acute EC50 5.38 mg/L Fresh water | Algae - Pseudokirchneriella subcapitata                                | 96 hours |
|                         | Acute EC50 2320 ug/L Fresh water | Daphnia - Daphnia magna - Neonate - <24 hours                          | 48 hours |
|                         | Acute LC50 22 ppm Fresh water    | Fish - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling) | 96 hours |

Conclusion/Summary : Not available.

#### Persistence/degradability

Conclusion/Summary : Not available.

### Canada

#### Aquatic ecotoxicity

Conclusion/Summary : Not available.

## 12. Ecological information

### Persistence/degradability

**Conclusion/Summary** : Not available.

### Mexico

#### Aquatic ecotoxicity

**Conclusion/Summary** : Not available.

#### Persistence/degradability

**Conclusion/Summary** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## 13. Disposal considerations

**Waste disposal** : Dispose of according to all federal, state and local applicable regulations.

**Contaminated packaging** : Waste must be disposed of according to applicable regulations. This material and its container must be disposed of as hazardous waste.

**Waste residues information** : Flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## 14. Transport information

| Regulatory information       | UN number      | Proper shipping name | Classes | PG* | Label | Additional information |
|------------------------------|----------------|----------------------|---------|-----|-------|------------------------|
| <b>DOT Classification</b>    | Not regulated. | -                    | -       | -   |       | -                      |
| <b>TDG Classification</b>    | Not regulated. | -                    | -       | -   |       | -                      |
| <b>Mexico Classification</b> | Not regulated. | -                    | -       | -   |       | -                      |
| <b>ADR/RID Class</b>         | Not regulated. | -                    | -       | -   |       | -                      |
| <b>IMDG Class</b>            | Not regulated. | -                    | -       | -   |       | -                      |
| <b>IATA-DGR Class</b>        | Not regulated. | -                    | -       | -   |       | -                      |

PG\* : Packing group

## 15. Regulatory information

### United States

**HCS Classification** : Irritating material  
Target organ effects

**U.S. Federal regulations** : TSCA : Exempt  
**SARA 302/304/311/312 extremely hazardous substances:** Hydrogen Peroxide, aqueous solution  
**SARA 302/304 emergency planning and notification:** Hydrogen Peroxide, aqueous solution  
**SARA 302/304/311/312 hazardous chemicals:** Hydrogen Peroxide, aqueous solution  
**SARA 311/312 MSDS distribution - chemical inventory - hazard identification:**  
 Hydrogen Peroxide, aqueous solution: Fire hazard, reactive, Immediate (acute) health hazard, Delayed (chronic) health hazard  
**Clean Water Act (CWA) 311:** Phosphoric Acid

## 15. Regulatory information

**Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### State regulations

**Massachusetts** : The following components are listed: HYDROGEN PEROXIDE

**New York** : The following components are listed: Hydrogen peroxide

**New Jersey** : The following components are listed: HYDROGEN PEROXIDE

**Pennsylvania** : The following components are listed: HYDROGEN PEROXIDE (CONC > 52 PERCENT)

### California Prop. 65

CALIFORNIA PROPOSITION 65: The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986. This product is not known to the State of California to cause cancer.

### Canada

#### Canadian lists

**Canada inventory** : Not determined.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

### Mexico

**Classification** :



### International regulations

**Chemical Weapons Convention List Schedule I Chemicals** : Not listed

**Chemical Weapons Convention List Schedule II Chemicals** : Not listed

**Chemical Weapons Convention List Schedule III Chemicals** : Not listed

## 16. Other information

**Hazardous Material Information System (U.S.A.)** :

|                  |   |
|------------------|---|
| Health           | 2 |
| Flammability     | 0 |
| Physical hazards | 0 |
|                  |   |

## 16. Other information

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.) :



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

**Date of printing** : 9/9/2013.  
**Date of issue** : 8/14/2012.  
**Date of previous issue** : No previous validation.  
**Version** : 1  
**Prepared by** : Regulatory Affairs Group

Indicates information that has changed from previously issued version.

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.