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Version 2

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product Name** PHOSPHORIC ACID, 75%

**Other means of identification**

**Product Code** 349  
**UN/ID No.** UN1805  
**Synonyms** None

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Acid.  
**Uses advised against** No information available

**Manufacturer Address**

Anderson Chemical Company, 325 South Davis Avenue, Litchfield, MN 55355 (320-693-2477)

**Emergency telephone number**

Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

**Classification**

|   |                           |
|---|---------------------------|
| Acute toxicity - Inhalation (Dusts/Mists) | Category 2                |
| Skin corrosion/irritation                 | Category 1 Sub-category B |
| Serious eye damage/eye irritation         | Category 1                |
| Corrosive to metals                       | Category 1                |

**Label elements**

**Emergency Overview**

**Danger**

**Hazard statements**

Fatal if inhaled  
 Causes severe skin burns and eye damage  
 May be corrosive to metals



**Appearance** aqueous solution

**Physical state** liquid

**Odor** Odorless

**Precautionary Statements - Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray  
 Wear respiratory protection  
 Wash face, hands and any exposed skin thoroughly after handling  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Use only in well-ventilated areas  
 Keep only in original container

**Precautionary Statements - Response**

Specific treatment is urgent (see Section 4 on this label)  
 Immediately call a POISON CENTER or doctor/physician

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 or doctor/physician  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 Wash contaminated clothing before reuse  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Immediately call a POISON CENTER or doctor/physician  
 IF SWALLOWED: Rinse mouth. DO NOT induce vomiting  
 Absorb spillage to prevent material damage

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
 Store locked up  
 Store in a corrosive resistant container

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)****Other Information**

- May be harmful if swallowed
- May be harmful in contact with skin
- Toxic to aquatic life with long lasting effects
- Toxic to aquatic life

Unknown Acute Toxicity                      0% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name   | CAS No.   | Weight-% | Trade Secret |
|-----------------|-----------|----------|--------------|
| Phosphoric acid | 7664-38-2 | 75       |              |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

**First aid measures**

|                       |   |
|-----------------------|---|
| <b>General advice</b> | Immediate medical attention is required.  |
| <b>Eye contact</b>    | Flush immediately with water for 15 minutes. Lift upper and lower eyelids for complete rinsing. Get immediate medical attention.  |
| <b>Skin Contact</b>   | Flush with water for 15 minutes. Get medical attention. Remove contaminated clothing and wash before reuse.   |
| <b>Inhalation</b>     | Remove victim from immediate source of exposure to fresh air. If breathing is difficult, administer oxygen if available. If victim is not breathing, administer CPR. If individual experiences nausea, headache, or dizziness, get immediate medical attention. |
| <b>Ingestion</b>      | Rinse mouth with water. Give water to dilute. Do not induce vomiting. Get immediate medical attention. Never give anything by mouth to a semi-comatose, comatose, convulsing or unconscious person.   |

**Most important symptoms and effects, both acute and delayed**

**Symptoms**                                      Causes severe irritation and or burns.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians**                              Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** None known.

**Specific hazards arising from the chemical**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**Hazardous combustion products** At flame temperatures, toxic phosphoric oxide fumes may be emitted.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

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

|                                  |  |
|----------------------------------|--|
| <b>Personal precautions</b>      | Evacuate nonessential personnel. Ventilate area. Wear appropriate personal protection equipment.   |
| <b>Environmental precautions</b> | See Section 12 for additional ecological information.  |
| <b>Methods for containment</b>   | Completely contain spilled material with dikes or sand bags, etc.  |
| <b>Methods for cleaning up</b>   | Recover as much material as possible into containers for disposal or reuse. Remaining material may be diluted with water and neutralized. Flush spill area with water. Neutralization products, both solid and liquid, must be recovered for disposal. |

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

|                                |  |
|--------------------------------|--|
| <b>Advice on safe handling</b> | Do not get in eyes, on skin, or clothing. Do not breathe vapors or mists. Do not ingest. Wash thoroughly after handling. Wear protective clothing/equipment. Use with adequate ventilation. NEVER add water to product. ALWAYS add product, with constant stirring, slowly to surface of water to minimize heat generation and spattering. |
|--------------------------------|--|

**Conditions for safe storage, including any incompatibilities**

|                               |  |
|-------------------------------|--|
| <b>Storage Conditions</b>     | Keep containers tightly closed and properly labeled. Containers that have been emptied will retain product residue and should be handled as if they were full. Store in a cool, dry, well-ventilated place away from incompatible materials. Wash hands before eating, drinking, using tobacco, applying make-up or using the toilet. Do not store, use, and/or consume foods, beverages, tobacco in areas where this product is stored. |
| <b>Incompatible materials</b> | Fluorine, strong oxidizing and reducing agents, bases, metals, sulfur trioxide, and phosphorus pentoxide.  |

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters****Exposure Guidelines**

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---------------|-----------|----------|------------|
|               |           |          |            |

|                              |   |   |   |
|------------------------------|---|---|---|
| Phosphoric acid<br>7664-38-2 | STEL: 3 mg/m <sup>3</sup><br>TWA: 1 mg/m <sup>3</sup> | TWA: 1 mg/m <sup>3</sup><br>(vacated) TWA: 1 mg/m <sup>3</sup><br>(vacated) STEL: 3 mg/m <sup>3</sup> | IDLH: 1000 mg/m <sup>3</sup><br>TWA: 1 mg/m <sup>3</sup><br>STEL: 3 mg/m <sup>3</sup> |
|------------------------------|---|---|---|

**Appropriate engineering controls**

Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

|                                 |   |
|---------------------------------|---|
| <b>Eye/face protection</b>      | Wear protective splash proof safety goggles. Additional full face protection is recommended if splashing is a possibility.  |
| <b>Skin and body protection</b> | Wear protective gloves and protective clothing.   |
| <b>Respiratory protection</b>   | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. |

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

|                       |                  |                       |                          |
|-----------------------|------------------|-----------------------|--------------------------|
| <b>Physical state</b> | liquid           | <b>Odor</b>           | Odorless                 |
| <b>Appearance</b>     | aqueous solution | <b>Odor threshold</b> | No information available |
| <b>Color</b>          | clear colorless  |                       |                          |

| <u>Property</u>               | <u>Values</u>            | <u>Remarks • Method</u> |
|-------------------------------|--------------------------|-------------------------|
| pH                            | <1                       |                         |
| Melting point/freezing point  | -17 °C / 1.4 °F          |                         |
| Boiling point / boiling range | 135 °C / 275 °F          |                         |
| Flash point                   | No information available |                         |
| Evaporation rate              | No information available |                         |
| Flammability (solid, gas)     | No information available |                         |
| Flammability Limit in Air     |                          |                         |
| Upper flammability limit:     | No information available |                         |
| Lower flammability limit:     | No information available |                         |
| Vapor pressure                | 0.29-0.75                |                         |
| Vapor density                 | No information available |                         |
| Specific Gravity              | 1.573                    |                         |
| Water solubility              | Miscible in water        |                         |
| Solubility in other solvents  | No information available |                         |
| Partition coefficient         | No information available |                         |
| Autoignition temperature      | No information available |                         |
| Decomposition temperature     | No information available |                         |
| Kinematic viscosity           | No information available |                         |
| Dynamic viscosity             | No information available |                         |
| Explosive properties          | No information available |                         |
| Oxidizing properties          | No information available |                         |

**Other Information**

|                  |                          |
|------------------|--------------------------|
| Softening point  | No information available |
| Molecular weight | No information available |
| VOC Content (%)  | No information available |
| Density          | No information available |
| Bulk density     | No information available |

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Conditions to avoid

Incompatible materials.

### Incompatible materials

Fluorine, strong oxidizing and reducing agents, bases, metals, sulfur dioxide, and phosphorus pentoxide.

### Hazardous Decomposition Products

Phosphorus oxides.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

|                            |  |
|----------------------------|--|
| <b>Product Information</b> | No data available  |
| <b>Inhalation</b>          | Corrosive by inhalation.   |
| <b>Eye contact</b>         | Corrosive to the eyes and may cause severe damage including blindness. |
| <b>Skin Contact</b>        | Contact causes severe skin irritation and possible burns.              |
| <b>Ingestion</b>           | Causes burns.  |

| Chemical Name                | Oral LD50            | Dermal LD50             | Inhalation LC50                     |
|------------------------------|----------------------|-------------------------|-------------------------------------|
| Phosphoric acid<br>7664-38-2 | = 1530 mg/kg ( Rat ) | = 2730 mg/kg ( Rabbit ) | > 850 mg/m <sup>3</sup> ( Rat ) 1 h |

### Information on toxicological effects

**Symptoms** No information available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

|                                 |                           |
|---------------------------------|---------------------------|
| <b>Sensitization</b>            | No information available. |
| <b>Germ cell mutagenicity</b>   | No information available. |
| <b>Carcinogenicity</b>          | No information available. |
| <b>Reproductive toxicity</b>    | No information available. |
| <b>STOT - single exposure</b>   | No information available. |
| <b>STOT - repeated exposure</b> | No information available. |
| <b>Aspiration hazard</b>        | No information available. |

### Numerical measures of toxicity - Product Information

**Unknown Acute Toxicity** 0% of the mixture consists of ingredient(s) of unknown toxicity  
The following values are calculated based on chapter 3.1 of the GHS document .

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

| Chemical Name                | Algae/aquatic plants | Fish  | Crustacea                            |
|------------------------------|----------------------|---|--------------------------------------|
| Phosphoric acid<br>7664-38-2 | -                    | 3 - 3.5: 96 h Gambusia affinis mg/L<br>LC50 | 4.6: 12 h Daphnia magna mg/L<br>EC50 |

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Other adverse effects**

No information available

### 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods****Disposal of wastes**

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

**Contaminated packaging**

Do not reuse container.

| Chemical Name                | California Hazardous Waste Status |
|------------------------------|-----------------------------------|
| Phosphoric acid<br>7664-38-2 | Corrosive                         |

### 14. TRANSPORT INFORMATION

**DOT**

|                      |                          |
|----------------------|--------------------------|
| UN/ID No.            | Regulated<br>UN1805      |
| Proper shipping name | Phosphoric Acid Solution |
| Hazard Class         | 8                        |
| Packing Group        | II                       |

### 15. REGULATORY INFORMATION

**International Inventories**

|               |                 |
|---------------|-----------------|
| TSCA          | Complies        |
| DSL/NDSL      | Complies        |
| EINECS/ELINCS | Complies        |
| ENCS          | Does not comply |
| IECSC         | Complies        |
| KECL          | Complies        |
| PICCS         | Complies        |
| AICS          | Complies        |

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

### US Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### **SARA 311/312 Hazard Categories**

|                                   |     |
|-----------------------------------|-----|
| Acute health hazard               | Yes |
| Chronic Health Hazard             | No  |
| Fire hazard                       | No  |
| Sudden release of pressure hazard | No  |
| Reactive Hazard                   | No  |

#### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

| Chemical Name                | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|------------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Phosphoric acid<br>7664-38-2 | 5000 lb                     | -                      | -                         | X                          |

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

| Chemical Name                | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ)                   |
|------------------------------|--------------------------|----------------|--|
| Phosphoric acid<br>7664-38-2 | 5000 lb                  | -              | RQ 5000 lb final RQ<br>RQ 2270 kg final RQ |

### US State Regulations

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals

#### **U.S. State Right-to-Know Regulations**

| Chemical Name                | New Jersey | Massachusetts | Pennsylvania |
|------------------------------|------------|---------------|--------------|
| Phosphoric acid<br>7664-38-2 | X          | X             | X            |

#### **U.S. EPA Label Information**

EPA Pesticide Registration Number Not Applicable

## 16. OTHER INFORMATION

|             |                  |                |                    |   |
|-------------|------------------|----------------|--------------------|---|
| <b>NFPA</b> | Health hazards 3 | Flammability 0 | Instability 0      | Physical and Chemical Properties -<br>Personal protection X |
| <b>HMIS</b> | Health hazards 3 | Flammability 0 | Physical hazards 0 |   |

|               |                          |
|---------------|--------------------------|
| Prepared By   | lmt                      |
| Issue Date    | 15-Oct-2014              |
| Revision Date | 14-Aug-2017              |
| Revision Note | No information available |

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**