SAFETY DATA SHEET

Issue Date 15-Oct-2014 **Revision Date** 09-Sept-2022 **Version** 3

SECTION 1. PRODUCT IDENTIFICATION

Product Name PHOSPHORIC ACID, 75% FG

Other means of identification
Product Code 349
UN/ID No. UN1805
Synonyms None

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

SECTION 2. HAZARD IDENTIFICATION

Classification

Acute toxicity - Oral	Category 4
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
Harmful if swallowed
Causes severe skin burns and eye damage
May be corrosive to metals

Appearance aqueous solution **Physical state** liquid **Odor** Odorless

Prevention Statement(s):
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.
Wear protective gloves and eye/face protection.

Response Statement(s):
Immediately call a POISON CENTER/doctor. Specific treatment (see first aid section on this SDS).
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF SWALLOWED: Rinse mouth. Do not induce vomiting.
Absorb spillage to prevent material damage.

Storage Statement(s):
Store in corrosive resistant container with a resistant inner liner.
Store locked up.

Disposal Statement(s):
Dispose of contents/container in accordance with local/ regional/ national/ international regulations.

2.3 OTHER HAZARDS:

None Applicable

SECTION 3. COMPOSITION AND INFORMATION ON INGREDIENTS

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

SECTION 4. FIRST-AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES:

EYE CONTACT: If product enters the eyes, open eyes while under gentle running water for several minutes. Remove contact lenses if present and easy to do. Continue rinseing for at least 15 minutes. Seek medical attention.

SKIN CONTACT: Wash skin thoroughly after handling. Seek medical attention if irritation develops and persists. Remove contaminated clothing. Launder before re-use.

INHALATION: If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention.

INGESTION: If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or SDS with the victim to the health professional.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing eye problems may be aggravated by prolonged contact.

4.2 SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:

Contact with eyes and skin may cause burns. Inhalation may cause upper respiratory irritation.

4.3 RECOMMENDATIONS TO PHYSICIANS:

Treat symptoms and eliminate overexposure.

SECTION 5. FIRE-FIGHTING MEASURES

5.1 FIRE EXTINGUISHING MATERIALS:

Use fire extinguishing methods below:

Water Spray:	Yes	Carbon Dioxide:	Yes
Foam:	Yes	Dry Chemical:	Yes
Halon:	Yes	Other:	Any "A" Class

5.2 UNUSUAL FIRE AND EXPLOSION HAZARDS:

None expected

Explosion Sensitivity to Mechanical Impact: No

Explosion Sensitivity to Static Discharge: No

5.3 SPECIAL FIRE-FIGHTING PROCEDURES:

Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

Avoid breathing mist / spray. Provide adequate ventilation. Wear suitable protective clothing, gloves and eye/face protection. Evacuate personnel to safe areas.

6.2 ENVIRONMENTAL PRECAUTIONS:

Not applicable.

6.3 SPILL AND LEAK RESPONSE:

Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Prevent entry into sewers, water courses, basement or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor.

SECTION 7. HANDLING and STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

To prevent skin and eye contact under the foreseeable conditions of use, wear appropriate protective clothing and safety eyewear. When handling, do not eat, drink, or smoke. Wash thoroughly after handling. Handle in a well-ventilated work area.

7.2 STORAGE AND HANDLING PRACTICES:

Keep away from incompatible materials. Eliminate all ignition sources. Keep in a dry, well-ventilated area in closed containers. Protect containers from physical damage. Keep container tightly closed and sealed until ready for use. Store in accordance with local regulations.

7.3 SPECIFIC USES:

Various uses.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 EXPOSURE PARAMETERS:

Chemical Name	CAS#	ACGIH TLV	OSHA TWA	EH40 TWA
Phosphoric Acid	7664-38-2	1 mg/m^3	1 mg/m^3	1 mg/m^3

8.2 EXPOSURE CONTROLS:

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

RESPIRATORY PROTECTION: Not required for properly ventilated areas. Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the

U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

EYE PROTECTION: Safety glasses or goggles are required. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards.

HAND PROTECTION: Chemical resistant gloves are required to prevent skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.

BODY PROTECTION: Use body protect appropriate to task being performed. If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136.

SECTION 9. PHYSICAL and CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE (Physical State) and COLOR: This product is a colorless viscous liquid.
ODOR: Odorless
ODOR THRESHOLD: Not Available
pH: <1
MELTING/FREEZING POINT: 75% -17.5 °C (0.5 °F)
85% 21.1 °C (70.0 °F)
BOILING POINT: 75% 135 °C (275 °F)
85% 158 °C (316 °F)
FLASH POINT: Not Available
EVAPORATION RATE (n-BuAc=1): Not Applicable
FLAMMABILITY (SOLID, GAS): Not Applicable
UPPER/LOWER FLAMMABILITY OR EXPLOSION LIMITS: Not Available
VAPOR PRESSURE (mm Hg @ 20°C (68°F): 75% (mm Hg @ 20°C (68 oF): 5.7 mmHg @ 20 °C (68 °F)
85% (mm Hg @ 20°C (68 oF): 2.2 mmHg @ 20 °C (68 °F)
VAPOR DENSITY: Not Available
RELATIVE DENSITY: Not Available
SPECIFIC GRAVITY: 75% 1.57 @25 °C
85% 1.69 @25 °C
SOLUBILITY IN WATER: Miscible
WEIGHT PER GALLON: Not Available
PARTITION COEFFICENT (n-octanol/water): Not Available
AUTO-IGNITION TEMPERATURE: Not Available
DECOMPOSITION TEMPERATURE: Not Available
VISCOSITY: Not Available

9.2 OTHER INFORMATION:

No additional information available at this time.

SECTION 10. STABILITY and REACTIVITY

10.1 REACTIVITY:

No dangerous reaction known under conditions of normal use.

10.2 STABILITY:

Stable.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS:

Hazardous reactions will not occur.

10.4 CONDITIONS TO AVOID:

Contact with incompatibles.

10.5 MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE:

Strong caustics, solutions containing bleach or ammonia, and most metals.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS:

Oxides of phosphorus.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

TOXICITY DATA:

Phosphoric Acid CAS# 7664-38-2

Oral LD50	1,530 mg/kg	Rat
Skin LD50	2,740 mg/kg	Rabbit

Acute toxicity	Acute Toxicity Category 4 (Oral)
Skin corrosion / irritation	Skin Corrosion Category 1
Serious eye damage / irritation	Eye Damage Category 1
Respiratory or skin sensitization	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Based on available data, the classification criteria are not met
Carcinogenicity	Based on available data, the classification criteria are not met
Reproductive toxicity	Based on available data, the classification criteria are not met
STOT-single exposure	Based on available data, the classification criteria are not met
STOT-repeated exposure	Based on available data, the classification criteria are not met
Aspiration hazard	Based on available data, the classification criteria are not met

ROUTE OF EXPOSURE: The most significant routes of overexposure for this product are by contact with eyes, and skin and respiratory system. The symptoms of overexposure are described in the following paragraphs.

ACUTE:

INHALATION: May cause upper respiratory tract irritation.

CONTACT WITH SKIN: Corrosive, exposure to skin may cause burns.

EYE CONTACT: Corrosive, will cause serious eye damage.

INGESTION: May cause burns to mouth and esophagus, abdominal pain, nausea, vomiting.

CHRONIC: May cause Bronchial irritation with chronic cough.

TARGET ORGANS: **Acute:** Skin, Eyes, and Respiratory System **Chronic:** Respiratory System

SUSPECTED CANCER AGENT: Ingredients within this product are not found on the following lists: FEDERAL OSHA Z LIST, NTP, IARC, or CAL/OSHA and therefore are not considered to be, nor suspected to be, cancer-causing agents by these agencies.

IRRITANCY OF PRODUCT: This product may be irritating to the skin, eyes and respiratory system.

SENSITIZATION TO THE PRODUCT: This product is not expected to cause skin sensitization.

REPRODUCTIVE TOXICITY INFORMATION: No specific information is available concerning the effects of this product and its components on the human reproductive system.

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE: Data not sufficient for classification.

SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE: Bronchial irritation with chronic cough.

ASPIRATION HAZARD: None

SECTION 12. ECOLOGICAL INFORMATION

12.1 TOXICITY:

Phosphoric Acid CAS# 7664-38-2

LC50 – 96hr	138 mg/L	Mosquitofish

12.2 PERSISTENCE AND DEGRADABILITY:

No specific data available on this product.

12.3 BIOACCUMULATIVE POTENTIAL:

No specific data available on this product.

12.4 MOBILITY IN SOIL:

No specific data available on this product.

12.5 RESULTS OF PBT AND vPvB ASSESSMENT:

No specific data available on this product.

12.6 OTHER ADVERSE EFFECTS:

No known significant effects or critical hazards.

12.7 WATER ENDANGERMENT CLASS:

May be water endangering in accordance with EU Guideline 91/155-EWG. Do not allow product to reach ground water, water course or sewage system. At present there are no ecotoxicological assessments for this product.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS:

Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

13.2 EU WASTE CODE:

Not determined

SECTION 14. TRANSPORTATION INFORMATION

US DOT, IATA, IMO, ADR:

14.1 U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS: This product is classified (per 49 CFR 172.101) by the U.S. Department of Transportation, as follows.

UN IDENTIFICATION NUMBER:	UN1805
PROPER SHIPPING NAME:	Phosphoric Acid Solution
HAZARD CLASS NUMBER and DESCRIPTION:	Class 8 Corrosive Liquid
PACKING GROUP:	III
DOT LABEL(S) REQUIRED:	Corrosive Liquid

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER: 154

RQ QUANTITY: 5000 LB

MARINE POLLUTANT: The components of this product are not designated by the Department of Transportation to be Marine Pollutants (49 CFR 172.101, Appendix B).

INTERNATIONAL AIR TRANSPORT ASSOCIATION SHIPPING INFORMATION (IATA): This product is considered as dangerous goods.

INTERNATIONAL MARITIME ORGANIZATION SHIPPING INFORMATION (IMO): This product is considered as dangerous goods.

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR): This product is considered by the United Nations Economic Commission for Europe to be dangerous goods.

SECTION 15. REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS SPECIFIC FOR THE SUBSTANCE OR MIXTURE:
UNITED STATES REGULATIONS:

U.S. SARA REPORTING REQUIREMENTS: The components of this product are not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

U.S. SARA 311/312: Acute Health

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for the components of this product. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lbs (4,540 kg) therefore applies, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): Phosphoric Acid - 5000 lb

U.S. TSCA INVENTORY STATUS: The components of this product are listed on the TSCA Inventory or are exempted from listing.

OTHER U.S. FEDERAL REGULATIONS: None known

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): This product does not contain ingredients on the Proposition 65 Lists.

15.2 CANADIAN REGULATIONS:

CANADIAN DSL/NDSL INVENTORY STATUS: Components are DSL Listed, NDSL Listed and/or are exempt from listing

OTHER CANADIAN REGULATIONS: Not applicable.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS:

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

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: Classified per WHMIS 2015 Hazardous Product Regulations.

15.3 EUROPEAN ECONOMIC COMMUNITY INFORMATION:

This product does meet the definition of a hazardous substance or preparation as defined by the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives.

See Section 2 for Details

CHEMICAL SAFETY ASSESSMENT:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

15.4 AUSTRALIAN INFORMATION FOR PRODUCT: Components of this product are not listed on the International Chemical Inventory list.

15.5 JAPANESE INFORMATION FOR PRODUCT:

JAPAN INDUSTRIAL SAFETY AND HEALTH LAW: This product has been classified per the Japan Industrial Safety and Health Law. See Section 2 for the GHS Classification.

15.6 INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:
Asia-Pac: Listed
Australian Inventory of Chemical Substances (AICS): Listed
Korean Existing Chemicals List (ECL): Listed
Japanese Existing National Inventory of Chemical Substances (ENCS): Listed
Philippines Inventory if Chemicals and Chemical Substances (PICCS): Listed
Swiss Giftliste List of Toxic Substances: Listed
U.S. TSCA: Listed
Mexican Inventory of chemical substances (NOM 010 STPS 2015): Listed

SECTION 16. OTHER INFORMATION

HMIS Rating (Scale 0-4)	**NFPA Rating (Scale 0-4)**
Health hazard: 3	Health hazard: 3
Flammability: 0	Flammability: 0
Physical Hazard: 0	Physical Hazard: 0

Abbreviations and acronyms

ACGIH	*American Conference of Governmental Industrial Hygienists*
CFR	*Code of Federal Regulations*
DOT	*Federal Department of Transportation*
GHS	*The Globally Harmonized System of Classification and Labelling of Chemicals*
HMIS	*Hazardous Material Identification System*
HCS	*Hazard Communication Standard*
IARC	*International Agency for Research on Cancer*
IATA	*The International Air Transport Association*
ICAO	The *International Civil Aviation Organization*
IMDG	*International Maritime Dangerous Goods*
IMO	*International Maritime Organization*
LD50/LC50	*Lethal Concentration/Dose, 50 percent*
NFPA	*National Fire Protection Association*
NIOSH	*National Institute for Occupational Safety and Health*
NTP	*National Toxicology Program*
OSHA	*Occupational Safety and Health*
PEL	*Permissible Exposure Limit*
SARA	*Superfund Amendments and Reauthorization Act*
TLV	*ACGIH Threshold Limit Value*
TWA	*Time-Weighted Average*

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END OF MSDS SHEET