Safety Data Sheet

Phosphoric Acid 30% Solution

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Phosphoric Acid 30% Solution

Synonyms/Generic Names: Orthophosphoric acid

Product Use: Industrial, Manufacturing or Laboratory use

Supplier: Skyhawk Chemicals, Inc.
701 N. Post Oak Rd., Ste 540
Houston, TX 77024

For More Information Call: Tel#: 713-957-2200 / 800-535-2847 Fax#: 713-957-0345 order@skyhawkchemicals.com

In Case of Emergency Call: CHEMTREC - ACCT: CCN721839 800-424-9300

2. HAZARDS IDENTIFICATION

OSHA Hazards: Target organ effect, Highly toxic by inhalation, Harmful by ingestion, Corrosive

Target Organs: Liver, Blood, Bone marrow

Signal Words: Danger

Pictograms:

GHS Classification:

Acute toxicity, Oral	Category 4
Acute toxicity, Inhalation	Category 2
Acute toxicity, Dermal	Category 5
Skin corrosion	Category 1B
Serious eye damage	Category 1

GHS Label Elements, including precautionary statements:

Hazard Statements:

H302	Harmful if swallowed.
H313	May be harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H330	Fatal if inhaled.

Precautionary Statements:

P260	Do not breathe dust/fume/gas/mist/vapor/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

P284	Wear respiratory protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.

Potential Health Effects

Eyes	Causes eye irritation.
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Skin	May be harmful if absorbed through skin. Causes skin irritation.
Ingestion	May be harmful if swallowed.

NFPA Ratings

Health	3
Flammability	0
Reactivity	0
Specific hazard	N/A

HMIS Ratings

Health	3
Fire	0
Reactivity	0
Personal	H

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Phosphoric Acid	30	7664-38-2	231-633-2	H_3PO_4	98.00 g/mol
Water	Balance	7732-18-5	231-791-2	H_2O	18.00 g/mol

4. FIRST-AID MEASURES

Eyes	Rinse with plenty of water for at least 15 minutes and seek medical attention immediately.
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.
Skin	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention immediately.
Ingestion	**Do Not Induce Vomiting!** Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media	Product is not flammable. Use appropriate media for adjacent fire. Cool containers with water.
Special protective equipment and precautions for firefighters	Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
Specific hazards arising from the chemical	Emits toxic fumes (phosphorus oxides) under fire conditions. (See also Stability and Reactivity section).

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.

Methods and materials for containment and cleaning up	Neutralize spill with sodium bicarbonate or lime. Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

7. HANDLING AND STORAGE

Precautions for safe handling
See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosols.

Conditions for safe storage, including any incompatibilities
Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls:

Component	Exposure Limits	Basis	Entity
Phosphoric Acid	1 mg/m^3	TLV	ACGIH
	3 mg/m^3	STEL	ACGIH
	1 mg/m^3	PEL	OSHA
	1 mg/m^3	REL	NIOSH
	3 mg/m^3	STEL	NIOSH
	1000 mg/m^3	IDLH	OSHA

TWA: Time Weighted Average over 8 hours of work.
TLV: Threshold Limit Value over 8 hours of work.
REL: Recommended Exposure Limit
PEL: Permissible Exposure Limit
STEL: Short Term Exposure Limit during x minutes.
IDLH: Immediately Dangerous to Life or Health
WEEL: Workplace Environmental Exposure Levels
CEIL: Ceiling

Personal Protection

Eyes	Wear chemical safety glasses or goggles, and face shield.
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
Skin	Wear nitrile or rubber gloves, and full body covering. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Other	Not Available

Other Recommendations
Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Clear liquid.
Odor	Odorless.

Odor threshold	Not Available
pH	Acidic.
Melting point/freezing point	Not Available
Initial boiling point and boiling range	Not Available
Flash point	Not Flammable
Evaporation rate	Not Available
Flammability (solid, gas)	Not Flammable
Upper/lower flammability or explosive limit	Not Explosive
Vapor pressure	Not Available
Vapor density	Not Available
Density	Not Available
Solubility (ies)	Soluble in water.
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Possibility of Hazardous Reactions	Will not occur.
Conditions to Avoid	Not Available
Incompatible Materials	Strong bases, powdered metals.
Hazardous Decomposition Products	Phosphorus oxides.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Phosphoric Acid

Skin	LD50 – Rabbit – 2,740 mg/kg
Eyes	Not Available
Respiratory	Not Available
Ingestion	LD50 – Rat – 1,530 mg/kg

Carcinogenicity

IARC	No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Signs & Symptoms of Exposure

Skin	Burning, itching, redness, inflammation, swelling of exposed tissue.
Eyes	Eye burns, watering eyes.
Respiratory	Burning, choking, coughing, wheezing, laryngitis, shortness of breath, headache or nausea.
Ingestion	Burning, choking, nausea, vomiting, severe pain.

Chronic Toxicity	Damage to organs.
Teratogenicity	Not Available
Mutagenicity	Not Available
Embryotoxicity	Not Available

Specific Target Organ Toxicity	Blood, liver, skin, eyes, bone marrow.
Reproductive Toxicity	Not Available
Respiratory/Skin Sensitization	Not Available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Phosphoric Acid

Aquatic Vertebrate	Not Available
Aquatic Invertebrate	Not Available
Terrestrial	Not Available

Persistence and Degradability	Not Available
Bioaccumulative Potential	Not Available
Mobility in Soil	Not Available
PBT and vPvB Assessment	Not Available
Other Adverse Effects	Not Available

13. DISPOSAL CONSIDERATIONS

Waste Residues	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residues.
Product Containers	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product containers.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

14. TRANSPORTATION INFORMATION

US DOT	UN1805, Phosphoric acid solution, 8, pg III
TDG	UN1805, PHOSPHORIC ACID SOLUTION, 8, pg III
IMDG	UN1805, PHOSPHORIC ACID SOLUTION, 8, pg III
Marine Pollutant	No
IATA/ICAO	UN1805, Phosphoric acid solution, 8, pg III

15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	All ingredients are listed on the DSCL inventory.
California Proposition 65	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Acute health hazard, Chronic health hazard.
SARA 312	Acute health hazard, Chronic health hazard.
SARA 313	Not Listed
WHMIS Canada	Class E: Corrosive liquid.

16. OTHER INFORMATION

Revision	Date
Revision 1	12/03/2012
Revision 2	08/14/2013