



DUDA ENERGY LLC

Safety Data Sheet PHOSPHORIC ACID 85% FG

SECTION 1: Identification

1.1 Product identifier

Product name	PHOSPHORIC ACID 85% FG
Product number	Unavailable
Brand	Unavailable
Substance name	Phosphoric Acid 85% FG
EC no.	231-633-2
CAS no.	7664-38-2
Index no.	015-011-00-6

1.2 Other means of identification

None

1.3 Recommended use of the chemical and restrictions on use

Industrially, phosphoric acid may be used in fertilizers, detergents, pharmaceuticals, water softeners. Also used commonly as a food additive.

1.4 Supplier's details

Name	Duda Energy LLC
Address	1112 Brooks St. Decatur, AL 35601 USA
Telephone	256.340.4866
Fax	Unavailable
email	Unavailable

1.5 Emergency phone number(s)

800.255.3924 (Chemtel)

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: UN GHS rev. 5

- Skin corrosion/irritation (chapter 3.2), Cat. 1B

- Eye damage/irritation (chapter 3.3), Cat. 1

2.2 GHS label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H314

Causes severe skin burns and eye damage

H318

Causes serious eye damage

H290

May be corrosive to metals

Precautionary statement(s)

P260

Do not breathe dust/fume/gas/mist/vapours/spray.

P264

Wash ... thoroughly after handling.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

P310

Immediately call a POISON CENTER/doctor/...

P363

Wash contaminated clothing before reuse.

P405

Store locked up.

P501

Dispose of contents/container to ...

2.3 Other hazards which do not result in classification

Unknown

SECTION 3: Composition/information on ingredients

3.1 Substances

Substance name	Phosphoric Acid 85% FG
EC no.	231-633-2
CAS no.	7664-38-2
Index no.	015-011-00-6
Formula	H3PO4
Molecular weight	98
Other names / synonyms	Phosphoric acid, 85%
Impurities and stabilizing additives	Other components below reportable levels: 15%

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice	Medical personnel should be aware of the material involved and take precautions to protect themselves.
If inhaled	Move to fresh air. If symptoms develop or persist, seek call a physician.
In case of skin contact	Immediately remove all contaminated clothing. Rinse skin with water. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
In case of eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and possible to do so. Continue rinsing. Call a physician or poison control center immediately.
If swallowed	Call a physician or poison control center immediately. Rinse mouth, do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Personal protective equipment for first-aid responders	Wear appropriate PPE where potentially hazardous materials may be present.

4.2 Most important symptoms/effects, acute and delayed

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage - including blindness - could result.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Provide general supportive measures and treat symptomatically. Chemical burns should be flushed with water immediately. While flushing, clothing which does not adhere to the affected area should be removed. Call an ambulance and continue flushing during transport to hospital. Keep the victim warm and under observation. Symptoms may be delayed.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

5.2 Specific hazards arising from the chemical

Hazardous gases may form during fire.

5.3 Special protective actions for fire-fighters

Self-contained breathing apparatus and full protective clothing should be worn in case of fire.

Further information

Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

6.2 Environmental precautions

Avoid discharge into drains, water courses, or onto the ground.

6.3 Methods and materials for containment and cleaning up

Large spills: Stop the flow of material if possible without posing risk to self or others. Dike the spilled material. Cover with plastic sheet to prevent spreading and absorb in vermiculite, dry sand, or earth and place into containers. Following product recovery, flush area with water.

Small spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Do not return spills to original containers for re-use.

Reference to other sections

See Sec. 8 for PPE information.

See Sec. 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provide adequate ventilation. Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink, or smoke. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

Store locked up. Store in original, tightly closed container. Store away from incompatible materials.

Specific end use(s)

Unavailable

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Phosphoric acid (CAS: 7664-38-2)

REL (Inhalation): 1 mg/m³, (ST) 3 mg/m³ (NIOSH)

OSHA Annotated Table Z-1, www.osha.gov

2. Phosphoric acid (CAS: 7664-38-2)

PEL (Inhalation): 1 mg/m³, (ST) 3 mg/m³ (Cal/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

3. Phosphoric acid (CAS: 7664-38-2)

PEL (Inhalation): 1 mg/m³ (OSHA)

OSHA Annotated Table Z-1, www.osha.gov

8.2 Appropriate engineering controls

Good ventilation should be used. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain at an acceptable level. Eye wash facilities and emergency shower stations must be available when handling this product.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Wear safety glasses with side shields, goggles, and a face shield.

Skin protection

Wear appropriate chemical resistant gloves.

Wear appropriate chemical resistant clothing.

Body protection

Chemical resistant clothing should be worn when handling.

Respiratory protection

In case of insufficient/poor ventilation, a respirator may be needed.

Thermal hazards

Wear appropriate thermal protective clothing when necessary.

Environmental exposure controls

Unavailable

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	Liquid - Clear/Colorless
Odor	No odor
Odor threshold	Unavailable
pH	Unavailable
Melting point/freezing point	42.4 °C/-15.56 °C
Initial boiling point and boiling range	197 °C - 400 °C
Flash point	537.2 °C
Evaporation rate	Unavailable
Flammability (solid, gas)	Combustible III B estimated
Upper/lower flammability limits	Unavailable
Upper/lower explosive limits	Unavailable
Vapor pressure	0.02 hPa (estimated)
Vapor density	Unavailable
Relative density	1.685
Solubility(ies)	Soluble in water, alcohol.
Partition coefficient: n-octanol/water	Unavailable
Auto-ignition temperature	Unavailable
Decomposition temperature	Unavailable
Viscosity	Unavailable
Explosive properties	Not explosive.

Oxidizing properties

Not oxidizing.

SECTION 10: Stability and reactivity

10.1 Reactivity

The product is stable and non-reactive under normal conditions of use, storage, and transport.

10.2 Chemical stability

Material is stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerization does not occur.

10.4 Conditions to avoid

Contact with incompatible materials.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Harmful if swallowed.

Phosphoric Acid (CAS 7664-38-2):

LD50 Skin - Rabbit - 2740 mg/kg

LD50 Oral - Rat - 1530 mg/kg

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory or skin sensitization

Not a respiratory nor skin sensitizer.

Germ cell mutagenicity

No indication that product is mutagenic or genotoxic.

Carcinogenicity

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive toxicity

This product is not expected to cause reproductive or developmental issues.

Summary of evaluation of the CMR properties

Not available.

STOT-single exposure

Not classified.

STOT-repeated exposure

Not classified.

Aspiration hazard

Not an aspiration hazard.

Additional information

Prolonged inhalation may be harmful.

SECTION 12: Ecological information

Toxicity

Ecology - air : Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009). Air pollutant.

Ecology - water : Mild water pollutant (surface water). May cause eutrophication. Toxic to plankton. Slightly harmful to bacteria. Slightly harmful to aquatic organisms. pH shift.

Phosphoric Acid 85% (7664-38-2)

LC50 Fish - 138 mg/l

Persistence and degradability

Unavailable

Bioaccumulative potential

Unavailable

Mobility in soil

Unavailable

Results of PBT and vPvB assessment

Unavailable

Other adverse effects

No other adverse environmental effects are known for this product.

SECTION 13: Disposal considerations

Disposal of the product

Collect and reclaim or dispose of in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with all local, regional, national, and international regulations.

Disposal of contaminated packaging

Emptied containers may contain material residue and should be handled in accordance with labelled warnings. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Waste treatment

Dispose of in accordance with local regulations. Waste material and residue should be disposed of in a safe manner in accordance with applicable regulations.

Sewage disposal

Dispose of in accordance with local regulations.

Other disposal recommendations

All material waste should be processed in accordance with local regulations.

SECTION 14: Transport information**DOT (US)**

UN Number: UN1805

UN Proper shipping name: PHOSPHORIC ACID, SOLUTION (RQ = RQ)

Transport hazard class(es): Class 8

Packing group: III

Special precautions: Read safety instructions, SDS and emergency procedures.

ERG Number: 154

DOT information on packaging may be different from that listed.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations specific for the product in question****New Jersey Right To Know Components**

Common name: PHOSPHORIC ACID

CAS number: 7664-38-2

Massachusetts Right To Know Components

Chemical name: Phosphoric acid

CAS number: 7664-38-2

15.2 Chemical Safety Assessment

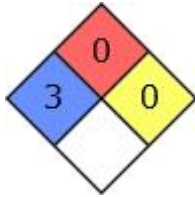
Unavailable

HMIS Rating

Phosphoric Acid 85% FG
HEALTH 3
FLAMMABILITY
PHYSICAL HAZARD

PERSONAL
PROTECTION

NFPA Rating



SECTION 16: Other information

16.1 Further information/disclaimer

The information provided in this Safety Data Sheet is correct to the best of Duda Energy LLC's 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. This Safety Data Sheet only contains information relating to safety and does not replace any product information or product specification. Please note, the content may be changed, corrected, or deleted at any time without notice and may not always necessarily reflect the most current data. Duda Energy LLC will assume no responsibility for any trouble or failure caused by the errors in the information provided, nor any damage associated with the usage of the information.

16.2 Preparation information

Version: 2
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