Phosphoric Acid 75-90% - Decolorized High Alkali Acid (DCHA)

Safety Data Sheet 227

Revision date: 06/5/2015

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form: Mixture
Product name: Decolorized High Alkali Acid (DCHA)
Product code: DCHA, DCHA75, DCHA81, DCHA85, DCHA88, DCHA90, DCLC85
Formula: \( \text{H}_3\text{PO}_4 \) (aq)
Synonyms: DCHA

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture: Industrial use

1.3. Details of the supplier of the safety data sheet

PCS Sales (USA), Inc.
1101 Skokie Blvd.
Suite 400
Northbrook, IL 60062
T 800-241-6908 / 847-849-4200

Suite 500
122 1st Avenue South
Saskatoon, Saskatchewan Canada S7K7G3
T 800-667-0403 (Canada) / 800-667-3930 (USA)

SDS@PotashCorp.com - www.PotashCorp.com

1.4. Emergency telephone number

Emergency number: 800-424-9300
CHEMTREC

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification
Acute Tox. 4 (Oral) H302
Skin Corr. 1A H314
Eye Dam. 1 H318
STOT SE 3 H335
Aquatic Acute 2 H401

2.2. Label elements

GHS-US labelling
Hazard pictograms (GHS-US):
Phosphoric Acid 75-90% - Decolorized High Alkali Acid (DCHA)

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage
H335 - May cause respiratory irritation
H401 – Toxic to aquatic life

Precautionary statements (GHS-US) : P260 - Do not breathe fume, mist, vapours, spray
P264 - Wash hands and forearms thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area
P273 - Avoid release to the environment
P278 - Wear eye protection, face protection, protective gloves, protective clothing
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P303+P351+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
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 or doctor
P363 - Wash contaminated clothing before reuse
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P405 - Store locked up
P501 - Dispose of contents/container according to local, regional, national, and international regulations

2.3. Other hazards

Hazardous to the aquatic environment
No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier (CAS No.)</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric acid</td>
<td>7664-38-2</td>
<td>81-90</td>
<td>Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 2, H401</td>
</tr>
</tbody>
</table>

Note: - DCHA75 - Typical Nutrient Strength is 54.33% (as P₂O₅) and total H₃PO₄ is 75%
Note: - DCHA, DCHA81 - Typical Nutrient Strength is 61.6% (as P₂O₅) and total H₃PO₄ is 80%
Note: - DCHA85 and DCLC85 - Typical Nutrient Strength is 62% (as P₂O₅) and total H₃PO₄ is 85%
Note: - DCHA88 - Typical Nutrient Strength is 63.8% (as P₂O₅) and total H₃PO₄ is 88%
Note: - DCHA90 - Typical Nutrient Strength is 65.22% (as P₂O₅) and total H₃PO₄ is 90%
SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general: IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation: Using proper respiratory protection, immediately move the exposed person to fresh air. Keep at rest and in a position comfortable for breathing. Give oxygen or artificial respiration if necessary. Seek immediate medical advice. Symptoms may be delayed.

First-aid measures after skin contact: Remove/Take off immediately all contaminated clothing. Rinse immediately with plenty of water (for at least 15 minutes). Seek medical attention immediately if exposure is severe. Obtain medical attention if irritation develops or persists. Wash contaminated clothing before reuse.

First-aid measures after eye contact: Immediately rinse with water for a prolonged period (at least 15 minutes) while holding the eyelids wide open. Seek medical attention immediately if exposure is severe. Obtain medical attention if irritation develops or persists.

First-aid measures after ingestion: If swallowed, do not induce vomiting. Seek medical advice immediately and show this container or label.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries: Corrosive. Causes burns. Harmful if swallowed.

Symptoms/injuries after inhalation: Causes severe respiratory irritation if inhaled. Symptoms may include: Burning of nose and throat, constriction of airway, difficulty breathing, shortness of breath, bronchial spasms, chest pain, and pink frothy sputum. Contact may cause immediate severe irritation progressing quickly to chemical burns. May cause pulmonary edema. Symptoms may be delayed.

Symptoms/injuries after skin contact: Contact may cause immediate severe irritation progressing quickly to chemical burns.

Symptoms/injuries after eye contact: Contact may cause immediate severe irritation progressing quickly to chemical burns. Can cause blindness.

Symptoms/injuries after ingestion: May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract. Swallowing a small quantity of this material will result in serious health hazard.

Chronic symptoms: Repeated or prolonged inhalation may damage lungs. Prolonged and repeated contact will eventually cause permanent tissue damage and effects such as erosion of teeth, lesions on the skin, tracheo-bronchitis, mouth inflammation, conjunctivitis, and gastritis.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media: Do not get water inside containers. Do not apply water stream directly at source of leak. Do not use a heavy water stream. A direct water stream will cause violent splattering and generation of heat.

5.2. Special hazards arising from the substance or mixture

Fire hazard: Not flammable. Under conditions of fire this material may produce: Oxides of phosphorus; Phosphine

Explosion hazard: Product is not explosive.

5.3. Advice for firefighters

Firefighting instructions: Keep upwind. Use water spray or fog for cooling exposed containers. If water is added to concentrated acid, violent splattering can occur, and considerable heat may be generated. Cool non-leaking, fire-exposed containers with water spray.

Protection during firefighting: Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products.

Other information: Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment: Use recommended respiratory protection. Wear suitable protective clothing, gloves and eye/face protection.


6.1.2. For emergency responders

Protective equipment: Use recommended respiratory protection. Wear suitable protective clothing, gloves and eye/face protection.


6.2. Environmental precautions

If spill could potentially enter any waterway, including intermittent dry creeks, contact the U.S. COAST GUARD NATIONAL RESPONSE CENTER at 800-424-8802. In case of accident or road spill notify CHEMTREC at 800-424-9300. In other countries call CHEMTREC at (International code) +1-703-527-3887.

6.3. Methods and material for containment and cleaning up

For containment: Contain any spills with dikes or inert absorbents to prevent migration and entry into sewers or streams. Do not allow into drains or water courses or dispose of where ground or surface waters may be affected.
Methods for cleaning up

Ventilate area. Small quantities of liquid spill: take up in non-combustible inert absorbent material and shovel into container for disposal. Collect absorbed material and place into a sealed, labelled container to be disposed at an appropriate disposal facility according to current applicable laws and regulations and product characteristics at the time of disposal.

Liquid spill: neutralize with powdered limestone or sodium bicarbonate.

Practice good housekeeping – spillage can be slippery on smooth surface either wet or dry.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Avoid all eye and skin contact and do not breathe vapour and mist. Wear recommended personal protective equipment. Ensure there is adequate ventilation. Keep away from heat and sources of ignition. Employ good maintenance practices to prevent leaks. Use good process control measures to prevent releases. Do not add water to acid. When diluting, always add acid to water. Causes severe burns.

Hygiene measures: Handle in accordance with good industrial hygiene and safety procedures. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in dry, cool area. Store in a well-ventilated place. Keep away from combustible materials. Diking of storage tanks is recommended.

Incompatible materials: Avoid contact with combustibles and reactive materials.

Prohibitions on mixed storage: Keep away from (strong) bases.

Storage area: Store in dry, cool area. Store in a well-ventilated place. Keep away from combustible materials.

7.3. Specific end use(s)

Industrial use

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Phosphoric acid (7664-38-2)</th>
<th>USA ACGIH</th>
<th>TWA / STEL</th>
<th>1 mg/m³ (TWA), 3 mg/m³ (STEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA NIOSH</td>
<td>IDLH</td>
<td></td>
<td>1000 mg/m³</td>
</tr>
<tr>
<td>USA NIOSH</td>
<td>TWA / STEL</td>
<td></td>
<td>1 mg/m³ (TWA), 3 mg/m³ (STEL)</td>
</tr>
<tr>
<td>USA OSHA</td>
<td>TWA</td>
<td></td>
<td>1 mg/m³</td>
</tr>
<tr>
<td>Alberta</td>
<td>TWA / STEL</td>
<td></td>
<td>1 mg/m³ (TWA), 3 mg/m³ (STEL)</td>
</tr>
<tr>
<td>British Columbia</td>
<td>TWA / STEL</td>
<td></td>
<td>1 mg/m³ (TWA), 3 mg/m³ (STEL)</td>
</tr>
</tbody>
</table>
8.2. Exposure controls

Appropriate engineering controls: Provide sufficient ventilation to keep vapors below the permissible exposure limit. Ensure adequate ventilation, especially in confined areas. Packaging and unloading areas and open processing equipment may require mechanical exhaust systems. Corrosion-proof construction recommended.

Personal protective equipment: Protective goggles. Face shield. Gas mask at concentration in the air >> TLV. Protective clothing.

Hand protection: Impermeable protective gloves, such as: nitrile, neoprene, or PVC. Wear gauntlet gloves. Check glove manufacturer’s permeation / degradation information.

Eye protection: Chemical safety goggles and full face shield. Do not wear contact lenses. For increased protection, use supplied-air acid hood.

Skin and body protection: Wear suitable protective clothing. Wear acid-resistant suit with acid-resistant apron, boots.

Respiratory protection: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits. Use respirator approved for acid fumes and mist.

Environmental exposure controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Appearance: Clear
Colour: Colorless
Phosphoric Acid 75-90% - Decolorized High Alkali Acid (DCHA)
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<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odour</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>1 – 1.5</td>
</tr>
<tr>
<td>pH solution</td>
<td>1 – 10 g/L</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>98 g/mol (Phosphoric acid)</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point/Freezing point</td>
<td>21.1 °C (70 °F) (85% Phosphoric acid)</td>
</tr>
<tr>
<td>Boiling point</td>
<td>158 °C (316 °F) (85% Phosphoric acid)</td>
</tr>
<tr>
<td>Boiling Point Range</td>
<td>(135 – 158) °C (275 - 316 °F)</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Self ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>1 - 4 mm Hg at 15.5 °C (60 °F)</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>3.4 (Air = 1)</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.6 - 1.7 at 25 °C (77 °F)</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>13 - 15 lb/gal</td>
</tr>
<tr>
<td>Solubility</td>
<td>Water: Miscible</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>23 cP at 40 °C (104 °F) (85% Phosphoric acid)</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
Material is hygroscopic. Acidic liquids, such as this material, may react with metals and release hydrogen gas.

10.2. Chemical stability
Stable at standard temperature and pressure.

10.3. Possibility of hazardous reactions
Hazardous polymerization will not occur.

10.4. Conditions to avoid
Protect from moisture. Avoid high temperatures.

10.5. Incompatible materials
Avoid contact with bases, aluminum, copper, mild steel, brass, and bronze.
10.6. Hazardous decomposition products
Under conditions of fire this material may produce: Oxides of phosphorus; Phosphine

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Harmful if swallowed.

<table>
<thead>
<tr>
<th>Phosphoric acid (7664-38-2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation : Causes severe skin burns and eye damage.
  pH: 1 – 1.5

Serious eye damage/irritation : Causes serious eye damage.
  pH: 1 – 1.5

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : May cause respiratory irritation.

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

<table>
<thead>
<tr>
<th>Ecotoxicity</th>
<th>EPA Ecological Toxicity rating :</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity to Fish:</td>
<td>(L. macrochirus (bluegill sunfish)) 96-hr static: LC₅₀ = pH 3.0–3.5.</td>
</tr>
<tr>
<td>Chronic Toxicity to Fish:</td>
<td>Mosquito fish: LC₅₀ = 138 mg/L; 96 hours</td>
</tr>
<tr>
<td>Acute Toxicity to Aquatic Invertebrates:</td>
<td>(Daphnia magna) 12-hr static: EC₅₀ = pH 4.6; (Daphnia pulex) 12-hr static: EC₅₀ = pH 4.1; (Gammarus pulex) 12-hr static: LC₅₀ = pH 3.4.</td>
</tr>
<tr>
<td>Chronic Toxicity to Aquatic Invertebrates:</td>
<td>No data available</td>
</tr>
<tr>
<td>Acute Toxicity to Aquatic Plants:</td>
<td>Dangerous to aquatic plants at high concentrations.</td>
</tr>
<tr>
<td>Toxicity to Bacteria:</td>
<td>(Activated sludge): EC₅₀ = pH 2.55.</td>
</tr>
<tr>
<td>Toxicity to Soil Dwelling Organisms:</td>
<td>No data available</td>
</tr>
<tr>
<td>Toxicity to Terrestrial Plants:</td>
<td>(Peas, beans, beets, rapeseed and weeds) Sprayed with 15-20% solution of H₃PO₄; Foliage was destroyed on all plants.</td>
</tr>
</tbody>
</table>

Environmental Fate:

| Stability in Water: | Ionic dissociation in water. |
| Stability in Soil: | Dissolves some soil material (carbonates). |
| Transport and Distribution: | Under acidic soil conditions, sparsely soluble phosphates tend to solubilize and may migrate to water. |

Toxicity: Inorganic phosphates have the potential to increase the growth of freshwater algae, whose eventual death will reduce the available oxygen for aquatic life.
**SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

**Sewage disposal recommendations**: This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

**Waste disposal recommendations**: Place in an appropriate container and dispose of the contaminated material at a licensed site.

**Additional information**: Dispose of waste material in accordance with all local, regional, national, and international regulations.

**SECTION 14: Transport information**

In accordance with DOT / TDG / ADR / RID / ADNR / IMDG / ICAO / IATA

### 14.1. UN number

**UN-No.(DOT)**: 1805

**DOT NA no.**: UN1805

### 14.2. UN proper shipping name

**DOT Proper Shipping Name**: Phosphoric Acid solution

**Department of Transportation (DOT) Hazard Classes**: 8 - Class 8 - Corrosive material 49 CFR 173.136

**Hazard labels (DOT)**: 8 - Corrosive substances

**Packing group (DOT)**: III - Minor
Phosphoric Acid 75-90% - Decolorized High Alkali Acid (DCHA)

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DOT Special Provisions (49 CFR 172.102)  :  A7 - Steel packagings must be corrosion-resistant or have protection against corrosion.

IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 °C (1.1 bar at 122 F), or 130 kPa at 55 °C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).

N34 - Aluminum construction materials are not authorized for any part of a packaging which is normally in contact with the hazardous material.

T4 - 2.65 178.274(d)(2) Normal............... 178.275(d)(3)

TP1- TP1 The maximum degree of filling must not exceed the degree of filling determined by the following:

\[
\text{Degree of filling} = \frac{97}{1 + \alpha (t_r - t_f)}
\]

Where:

\( t_r \) is the maximum mean bulk temperature during transport, and \( t_f \) is the temperature in degrees Celsius of the liquid during filling (For additional clarification, see 49 CFR 172.102(8)).

DOT Packaging Exceptions (49 CFR 173.xxx)  :  154

DOT Packaging Non Bulk (49 CFR 173.xxx)  :  203

DOT Packaging Bulk (49 CFR 173.xxx)  :  241

14.3. Additional information

Emergency Response Guide (ERG) Number  :  154

Reportable Quantity  :  5000 pounds (at 100% Phosphoric Acid)

Other information  :  No supplementary information available.

Overland transport

No additional information available

Transport by sea

DOT Vessel Stowage Location  :  A - The material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel.

Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)  :  5 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)  :  60 L

IATA ERG Number  :  8L
**Phosphoric Acid 75-90% - Decolorized High Alkali Acid (DCHA)**

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### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

<table>
<thead>
<tr>
<th>Phosphoric Acid 81-90% Technical Grade</th>
<th>SARA Section 311/312 Hazard Classes</th>
<th>Immediate (acute) health hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric acid (7664-38-2)</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
<td></td>
</tr>
</tbody>
</table>

#### 15.2. US State regulations

The following states have an OSH program approved by OSHA. If you are located in any of these states you may be under state jurisdiction rather than federal jurisdiction and your state may have more stringent requirements than OSHA. You should consult your state regulations to ensure compliance.

<table>
<thead>
<tr>
<th>State</th>
<th>State</th>
<th>State</th>
<th>State</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska</td>
<td>Indiana</td>
<td>Minnesota</td>
<td>North Carolina</td>
<td>Utah</td>
</tr>
<tr>
<td>Arizona</td>
<td>Iowa</td>
<td>Nevada</td>
<td>Oregon</td>
<td>Vermont</td>
</tr>
<tr>
<td>California</td>
<td>Kentucky</td>
<td>New Mexico</td>
<td>Puerto Rico</td>
<td>*Virgin Islands</td>
</tr>
<tr>
<td>*Connecticut</td>
<td>Maryland</td>
<td>*New Jersey</td>
<td>South Carolina</td>
<td>Virginia</td>
</tr>
<tr>
<td>Hawaii</td>
<td>Michigan</td>
<td>*New York</td>
<td>Tennessee</td>
<td>Washington</td>
</tr>
<tr>
<td>*Illinois</td>
<td></td>
<td></td>
<td></td>
<td>Wyoming</td>
</tr>
</tbody>
</table>

*The state plans in these states apply only to public sector employers. In these states private sector employers are subject to USOL – OSHA jurisdiction. All other state plans apply to both public and private sector employers.*

**Phosphoric acid (7664-38-2)**

- U.S. - California - SCAQMD - Toxic Air Contaminants - Non-Cancer Chronic
- U.S. - California - Toxic Air Contaminant List (AB 1807, AB 2728)
- U.S. - Connecticut - Hazardous Air Pollutants - HLVs (30 min)
- U.S. - Connecticut - Hazardous Air Pollutants - HLVs (8 hr)
- U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities
- U.S. - Hawaii - Occupational Exposure Limits - STELS
- U.S. - Hawaii - Occupational Exposure Limits - TWAs
- U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations
- U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs)
- U.S. - Idaho - Occupational Exposure Limits - TWAs
- U.S. - Louisiana - Reportable Quantity List for Pollutants
- U.S. - Massachusetts - Allowable Ambient Limits (AALs)
- U.S. - Massachusetts - Allowable Threshold Concentrations (ATCs)
- U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Conc. - Reporting Category 1
- U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Conc. - Reporting Category 2
- U.S. - Massachusetts - Oil & Hazardous Material List - Reportable Quantity
- U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 1
- U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 2
- U.S. - Massachusetts - Right To Know List
- U.S. - Massachusetts - Threshold Effects Exposure Limits (TEls)
- U.S. - Massachusetts - Toxics Use Reduction Act
- U.S. - Michigan - Occupational Exposure Limits - STELS
- U.S. - Michigan - Occupational Exposure Limits - TWAs
**15.3. Canadian regulations**

<table>
<thead>
<tr>
<th><strong>Phosphoric Acid 81-90% Technical Grade</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>WHMIS Classification</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Phosphoric acid (7664-38-2)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the Canadian DSL (Domestic Substances List) inventory.</td>
</tr>
<tr>
<td>Listed on the Canadian Ingredient Disclosure List – Disclosure at 1%</td>
</tr>
<tr>
<td>WHMIS Classification</td>
</tr>
</tbody>
</table>

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.
**Phosphoric Acid 75-90% - Decolorized High Alkali Acid (DCHA)**

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### SECTION 16: Other information

**NFPA health hazard**: 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

**NFPA fire hazard**: 0 - Materials that will not burn.

**NFPA reactivity**: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

Full text of H-phrases:

<table>
<thead>
<tr>
<th>Acute Tox. 4 (Oral)</th>
<th>Acute toxicity (oral) Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic Acute 2</td>
<td>Hazardous to the aquatic environment - Acute Hazard Category 2</td>
</tr>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage/eye irritation Category 1</td>
</tr>
<tr>
<td>Met. Corr. 1</td>
<td>Corrosive to metals Category 1</td>
</tr>
<tr>
<td>Skin Corr. 1A</td>
<td>Skin corrosion/irritation Category 1A</td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>Toxicity (single exposure) (Eye and Respiratory) Category 3</td>
</tr>
<tr>
<td>H290</td>
<td>May be corrosive to metals</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation</td>
</tr>
</tbody>
</table>

Previous PotashCorp MSDS Number: MSDS 78 - Phosphoric Acid 81-90% Technical Grade (for IND85, TG85, TG85LS – see SDS 229 for these products)

Updated Section: Section 16 – NFPA Symbol

**SDS US (GHS HazCom 2012)**

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