


## SAFETY DATA SHEET

### Phosphoric Acid

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

<b>1.1 Product identifier:</b>	
<b>CAS Number:</b>	7664-38-2
<b>EC number:</b>	231-633-2
<b>1.2 SYNONYMS</b>	GRMGA, PAPMGA, GQ54, PHOS54, PHOS60

#### SECTION 2: Hazards identification:

<b>2.1 Classification of the substance or mixture:</b>	Classification according to Regulation (EC) No 231-633-2 The substance is classified according to the CLP regulation.
<b>2.2 Label elements:</b>	Labelling according to Regulation (EC) No 231-633-2
<b>Hazard Pictograms:</b>	
<b>Signal Word:</b>	corrosive
<b>Hazard statements:</b>	<b>H314:</b> Causes severe skin burns and eye damage
<b>Precautionary Statements:</b>	<b>P280:</b> Wear protective gloves/protective clothing/eye protection/face protection. <b>P305 + P351 + P338:</b> IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
<b>2.3 Other hazards:</b>	
<b>Inhalation:</b>	Inhalation can cause irritation or corrosive burns to the upper respiratory system, including nose, mouth, and throat. Lung irritation and pulmonary edema and chemical pneumonitis can also occur
<b>Ingestion:</b>	Ingestion causes irritation and can cause corrosive burns to mouth,

	throat and stomach resulting in hemorrhaging and permanent damage. Can be fatal if swallowed.
<b>Skin Contact:</b>	May cause severe burns and ulceration to skin.
<b>Eye contact:</b>	Contact causes eye irritation, may cause burns or blindness.
<b>Chronic Exposure:</b>	No data available
<b>Aggravation of pre-existing conditions :</b>	No data

### SECTION 3: Composition/information on ingredients

<b>3.1 Chemical characterisation:</b>	Substances
<b>CAS No:</b>	Description: 7664-38-2 Phosphoric Acid
<b>Identification number(s):</b>	EC number: 231-633-2

### SECTION 4: First aid measures

<b>4.1 Description of first aid measures</b>	
<b>General information:</b>	
<b>After inhalation:</b>	Remove to fresh air. If breathing has stopped, give artificial respiration with the aid of a pocket mask equipped with a one way valve or other proper respiratory medical device. If breathing with difficulty, give oxygen. Observe for possible delayed reaction
<b>After skin contact:</b>	Immediately flush skin with plenty of water while removing contaminated clothing. Get medical attention if irritation develops or persists.
<b>After eye contact:</b>	Immediately flush eyes (holding eyelids apart) with plenty of water for at least 15 minutes. Get medical attention.
<b>After swallowing:</b>	Do not induce vomiting. Drink large amounts of water (or milk if

	available) to dilute the acid. Get medical attention immediately.
<b>4.2 Most important symptoms and effects, both acute and delayed:</b>	No data
<b>4.3 Indication of any immediate medical attention and special treatment needed:</b>	No data

## SECTION 5: Firefighting measures

<b>5.1 Extinguishing media</b>	Phosphoric Acid is not flammable; use most appropriate agent to extinguish surrounding material.
<b>5.2 Special hazards arising from the substance or mixture</b>	No data
<b>5.3 Advice for firefighters</b>	No data
<b>5.4 further information</b>	no data available

## SECTION 6: Accidental release measures

<b>6.1 Personal precautions, protective equipment and emergency procedures</b>	No data
<b>6.2 Environmental precautions:</b>	No data
<b>6.3 Methods and material for containment and cleaning up:</b>	No data

## SECTION 7: Handling and storage

<b>7.1 Precautions for safe handling</b>	Use appropriate personal protective equipment as specified in Section VIII. Avoid contact with skin and eyes. Avoid inhalation and ingestion.
<b>7.2 Conditions for safe storage, including any incompatibilities</b>	Store in unopened container in cool, well ventilated area, away from potential sources of heat and fire. Keep away from combustible

	materials, strong bases and metals. Large storage tanks should be bermed and electrically grounded. Avoid using glass or unprotected steel containers
<b>Requirements to be met by storerooms and receptacles:</b>	No data
<b>7.3 Specific end uses</b>	Use with adequate ventilation.

## SECTION 8: Exposure controls/personal protection

<b>8.1 Control parameters</b>	
<b>Additional information about design of technical facilities:</b>	No data
<b>8.2 Exposure controls</b>	
<b>Appropriate engineering controls</b>	Good ventilation should be sufficient to control airborne levels
<b>Personal protective equipment:</b>	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
<b>General protective and hygienic measures:</b>	No data
<b>Respiratory protection:</b>	Wear NIOSH approved respiratory protective equipment when vapor or mists may exceed applicable concentration limits.
<b>Protection of hands:</b>	No data
<b>Eye protection:</b>	Wear chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent) when eye and face contact is possible due to splashing or spraying of material.
<b>Protection of Body:</b>	Where contact is likely, wear chemical-resistant gloves, a chemical suit, rubber boots and chemical safety goggles plus a face shield.

## SECTION 9: Physical and chemical properties

<b>9.1 Information on basic physical and chemical properties</b>	
<b>General Information</b>	
<b>Appearance: Form:</b>	viscous liquid
<b>Colour:</b>	Green

<b>Odour:</b>	acrid odor
<b>pH-value:</b>	1-1.5 at 1-10 g/L
<b>Melting point/Melting range:</b>	Not Applicable
<b>Boiling point/Boiling range:</b>	268-380°F
<b>Flammability (solid, gaseous):</b>	Not applicable
<b>Ignition temperature:</b>	No data available
<b>Decomposition temperature:</b>	No data available
<b>Self-igniting:</b>	No data available
<b>Flash point:</b>	Not applicable
<b>Danger of explosion:</b>	No data available
<b>Explosion limits: Lower:</b>	No data available
<b>Explosion limits: Upper:</b>	No data available
<b>Vapour pressure:</b>	0.0001 mmHg
<b>Density at 20 °C:</b>	1.88 g/cm <sup>3</sup>
<b>Relative density:</b>	1.88.
<b>Vapour density:</b>	No data available
<b>Evaporation rate:</b>	No data available
<b>Solubility in / Miscibility with-water at 20 °C:</b>	Complete
<b>Partition coefficient:(n-octanol/water)</b>	No data available
<b>Viscosity:</b>	67-140 cp @ 75°F, 40-95 cp @ 100°F (53- 62% P2O5)

## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	No data available
<b>10.2 Chemical stability</b>	This product is hygroscopic, but is stable under normal conditions of storage, handling and use
<b>10.3 Possibility of hazardous reactions</b>	Will not occur
<b>10.4 Conditions to avoid</b>	High temperatures

<b>10.5 Incompatible materials</b>	Bases, aluminum, copper, mild steel, brass and bronze
<b>10.6 Hazardous decomposition products</b>	Fluoride compounds from the heating of wet process acid, phosphorus oxides and/or phosphine from thermal decomposition and hydrogen gas from reaction with metals

## SECTION 11: Toxicological information

<b>11.1 Information on toxicological effects</b>	
<b>Acute Toxicity:</b>	<b>LD50(Rat)</b> = 1,530 mg/kg bw <b>LC50(Guinea pig, mouse, rat, rabbit ) 1-hr:</b> 61 – 1,689 mg/m <sup>3</sup> P2O5.
<b>Skin corrosion/Irritation:</b>	Skin Irritation/Corrosion: (Rabbit) 24-hr: Highly irritating to corrosive
<b>Serious eye damage/irritation:</b>	Eye Irritation/Corrosion: (Rabbit) OECD Guideline 405: Not irritating at 17% solution but severe irritation at higher concentration.
<b>Respiratory damage/irritation:</b>	No data available
<b>Ingestion:</b>	No data available
<b>Germ cell mutagenicity:</b>	No data available
<b>Carcinogenicity:</b>	No data available
<b>Reproductive toxicity:</b>	(Rat) One-generation: 375 mg/kg bw did not affect offspring growth in rats.
<b>Specific target organ toxicity - single exposure:</b>	No data available
<b>Specific target organ toxicity - repeated exposure:</b>	No data available
<b>Aspiration hazard:</b>	No data available
<b>Signs and Symptoms of Exposure:</b>	No data available
<b>11.2 Additional toxicological information</b>	
<b>Aquatic Toxicity:</b>	No data available
<b>Biodegradability:</b>	No data available

## SECTION 12: Ecological information

<b>12.1 Toxicity Aquatic toxicity:</b>	(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
<b>12.2 Persistence and degradability:</b>	No data available
<b>12.3 Bioaccumulative potential:</b>	No data available
<b>12.4 Mobility in soil:</b>	No data available
<b>12.5 Other adverse effects</b>	No data available

## SECTION 13: Disposal considerations

<b>13.1 Waste treatment methods</b>	
<b>Uncleaned packaging Recommendation:</b>	<b>Proper Disposal:</b> If the packaging cannot be cleaned effectively, dispose of it in accordance with local regulations for hazardous waste or corrosive materials. Use an authorized waste disposal service to ensure safe handling.
<b>Recommended cleansing agents:</b>	Diluted Sodium Bicarbonate (Baking Soda), Lime (Calcium Oxide or Calcium Hydroxide), Water and Soap, Ammonia Solution, Commercial Acid Neutralizers

## SECTION 14: Transport information

<b>14.1 UN-Number · ADR, ADN, IMDG, IATA:</b>	1805
<b>14.2 UN proper shipping name · ADR, ADN, IMDG, IATA:</b>	Phosphoric Acid, Solution
<b>14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA :</b>	8
<b>14.4 Packing group · ADR, IMDG, IATA:</b>	III
<b>14.5 Environmental hazards:</b>	No data available
<b>14.6 Special precautions for user</b>	No data available

## SECTION 15: Regulatory information

<b>15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Directive 2012/18/EU</b>	Phosphoric acid falls under <b>Category 3</b> of Directive 2012/18/EU (Seveso III) as a <b>substance with hazardous properties</b> but does not meet the thresholds for major accident hazards.
<b>Named dangerous substances</b>	<b>phosphoric acid</b> is considered a hazardous substance, but its classification depends on the concentration and the context in which it is used.
<b>15.2 Chemical safety assessment:</b>	Chemical assessment has been carried out under <b>REACH</b> regulation.

## SECTION 16: Other information

The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product

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