

Super Phosphoric Acid 0-68-0

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Date of issue: 06/11/2020

Revision date: 06/11/2020

Version: 1.0

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture
Product name : Super Phosphoric Acid 0-68-0
Product code : M12000
Product group : Raw material

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Simplot Canada (II) Limited
P.O. Box 1180
Portage LaPrairie, MB R1N 319

1.4. Emergency telephone number

Emergency number : CHEMTREC 1-800-424-9300

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Acute toxicity (oral), Category 4 H302 Harmful if swallowed.
Acute toxicity (dermal), Category 4 H312 Harmful in contact with skin.
Skin corrosion/irritation, Category 1 H314 Causes severe skin burns and eye damage.
Serious eye damage/eye irritation, Category 1 H318 Causes serious eye damage.

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS CA labelling

Hazard pictograms (GHS CA) :



Signal word (GHS CA) :

Danger

Hazard statements (GHS CA) :

H302+H312 - Harmful if swallowed or in contact with skin
H314 - Causes severe skin burns and eye damage.

Precautionary statements (GHS CA) :

P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P302+P352 - IF ON SKIN: Wash with plenty of water.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .
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.
P312 - Call a POISON CENTER or doctor if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction on this label)
P330 - Rinse mouth.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P363 - Wash contaminated clothing before reuse.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards

No additional information available

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2.4. Unknown acute toxicity (GHS CA)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
phosphoric acid (7664-38-2)	orthophosphoric acid, conc=75%, aqueous solution / phosphoric acid / Phosphoric acid, solution	(CAS-No.) 7664-38-2	93.5	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314
hexafluorosilicic acid	dihydrogen hexafluorosilicate (2-), conc=25%, aqueous solution / dihydrogen hexafluorosilicate, conc=25%, aqueous solution / fluorosilic acid, conc=25%, aqueous solution / Fluorosilicic acid / fluorosilicic acid, conc=25%, aqueous solution / fluosilic acid, conc=25%, aqueous solution / hexafluorosilicate dihydrogen, conc=25%, aqueous solution / hexafluosilicic acid, conc=25%, aqueous solution / hydrofluorosilicic acid, conc=25%, aqueous solution / hydrofluosilic acid, conc=25%, aqueous solution / hydrofluosilic acid (H2SiF6), conc=25%, aqueous solution / hydrofluosilicic acid, conc=25%, aqueous solution / hydrofluosilic acid, conc=25%, aqueous solution / hydrogen hexafluorosilicate, conc=25%, aqueous solution / hydrogensilicofluoride, conc=25%, aqueous solution / hydrosilicofluoric acid, conc=25%, aqueous solution / hydrosilicofluoric acid, conc=25%, aqueous solution / sand acid, conc=25%, aqueous solution / silicofluoric acid, conc=25%, aqueous solution / silicon hexafluoride dihydride, conc=25%, aqueous solution	(CAS-No.) 16961-83-4	1	Skin Corr. 1B, H314

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
First-aid measures after skin contact	: Immediately call a POISON CENTER/doctor. Specific measures (see supplemental first aid instruction on this label). Wash with plenty of water/.... Wash contaminated clothing before reuse. Take off immediately all contaminated clothing. Rinse skin with water/shower.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER/doctor if you feel unwell. Immediately call a POISON CENTER/doctor. Call a poison center or a doctor if you feel unwell.
First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects	: Causes severe skin burns and eye damage.
Symptoms/effects after skin contact	: Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin.
Symptoms/effects after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met. Harmful if swallowed. Harmful in contact with skin.

4.3. Immediate medical attention and special treatment, if necessary

Other medical advice or treatment	: Treat symptomatically.
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SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

5.2. Unsuitable extinguishing media

Unsuitable extinguishing media : Do not use a heavy water stream.

5.3. Specific hazards arising from the hazardous product

No additional information available

5.4. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

6.2. Methods and materials for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Absorb spillage to prevent material damage.

Other information : Dispose of materials or solid residues at an authorized site.

6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact during pregnancy/while nursing.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling. Always wash hands after handling the product.

Additional hazards when processed : May be corrosive to metals.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use. Store in a well-ventilated place. Keep cool.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

Packaging materials : Store in corrosive resistant container with a resistant inner liner.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

phosphoric acid (7664-38-2) (7664-38-2)		
USA - ACGIH	ACGIH TWA (mg/m ³)	1 mg/m ³
USA - ACGIH	ACGIH STEL (mg/m ³)	3 mg/m ³
hexafluorosilicic acid (16961-83-4)		
USA - ACGIH	ACGIH TWA (mg/m ³)	2.5 mg/m ³

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves.

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Eye protection:

Chemical goggles or face shield. Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Wear appropriate mask

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Green, viscous liquid.
Colour	: Green
Odour	: Odorless when cold; pungent when hot.
Odour threshold	: No data available
pH	: < 1
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: 132 °C
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Vapour pressure at 50 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	: Thermal decomposition generates : Corrosive vapours.
Chemical stability	: Not established.
Possibility of hazardous reactions	: Not established.
Conditions to avoid	: Strong Alkalies. Metals other than stainless steel. Direct sunlight. Extremely high or low temperatures.
Incompatible materials	: Reacts violently with strong alkalies producing heat. Contact with many metals may result in severe corrosion attack of the metal and liberation of hydrogen gas. Strong acids. Strong bases. metals. May be corrosive to metals.
Hazardous decomposition products	: High temperatures will liberate phosphorus oxides. fume. Carbon monoxide. Carbon dioxide. Thermal decomposition generates : Corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Harmful in contact with skin.
Acute toxicity (inhalation)	: Not classified

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LD50 oral rat	1530 mg/kg
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LD50 dermal rat	1260 mg/kg
ATE CA (oral)	1530 mg/kg bodyweight
ATE CA (Dermal)	1260 mg/kg bodyweight

phosphoric acid (7664-38-2) (7664-38-2)	
LD50 oral rat	1530 mg/kg (Rat)
LD50 dermal rat	>= 1260 mg/kg bodyweight
LC50 inhalation rat (mg/l)	>= mg/l/4h
ATE CA (oral)	1530 mg/kg bodyweight

Skin corrosion/irritation	: Causes severe skin burns and eye damage. pH: < 1
Serious eye damage/irritation	: Causes serious eye damage. pH: < 1
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met. Harmful if swallowed. Harmful in contact with skin.
Symptoms/effects	: Causes severe skin burns and eye damage.
Symptoms/effects after skin contact	: Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin.
Symptoms/effects after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

phosphoric acid (7664-38-2) (7664-38-2)	
LC50 fish 1	138 mg/l (96 h; Pisces; Pure substance)
LC50 fish 2	100 - 1000 mg/l (Pisces; Pure substance)
LC50 other aquatic organisms 1	240 mg/l (96 h; Protozoa; Pure substance)
LC50 other aquatic organisms 2	100 - 1000 mg/l (Pure substance)
Log Pow	-0.77 (Estimated value)
TLM fish 1	138 ppm (24 h; Gambusia affinis; Pure substance)
Threshold limit other aquatic organisms 1	240 mg/l (96 h; Protozoa; Pure substance)
Threshold limit other aquatic organisms 2	100 - 1000, Pure substance

hexafluorosilicic acid (16961-83-4)	
LC50 fish 1	> 10 mg/l (96 h; Brachydanio rerio)
Threshold limit algae 1	10 mg/l (96 h; Scenedesmus quadricauda; Cell numbers)

12.2. Persistence and degradability

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Persistence and degradability	Not established.

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phosphoric acid (7664-38-2) (7664-38-2)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the components available. Not established.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

hexafluorosilicic acid (16961-83-4)	
Persistence and degradability	Biodegradability: not applicable. Reacts with water: release of toxic/harmful substances. No (test)data on mobility of the components available. Not established.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. Bioaccumulative potential

Super Phosphoric Acid 0-68-0	
Bioaccumulative potential	Not established.

phosphoric acid (7664-38-2) (7664-38-2)	
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.
Log Pow	-0.77 (Estimated value)

hexafluorosilicic acid (16961-83-4)	
Bioaccumulative potential	Not bioaccumulative. Not established.

12.4. Mobility in soil

phosphoric acid (7664-38-2) (7664-38-2)	
Log Pow	-0.77 (Estimated value)

12.5. Other adverse effects

Ozone	: Not classified
Other information	: Avoid unintentional release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Ecology - waste materials	: Avoid unintentional release to the environment.

SECTION 14: Transport information

14.1. Basic shipping description

In accordance with TDG

Transportation of Dangerous Goods

Not regulated for transport

14.2. Transport information/DOT

Department of Transport

DOT NA No	: UN1805
UN-No.(DOT)	: 1805
Packing group (DOT)	: III - Minor Danger
Transport document description	: UN1805 Phosphoric acid solution, 8, III
Proper Shipping Name (DOT)	: Phosphoric acid solution
Contains Statement Field Selection (DOT)	:
Class (DOT)	: 8 - Class 8 - Corrosive material 49 CFR 173.136
Division (DOT)	: 8

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Hazard labels (DOT) : 8 - Corrosive



Dangerous for the environment : No

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 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / (1 + a (tr - tf))$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

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

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

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

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

Other information : No supplementary information available.

14.3. Air and sea transport

IMDG

UN-No. (IMDG) : 1805

Proper Shipping Name (IMDG) : PHOSPHORIC ACID SOLUTION

Transport document description (IMDG) : UN 1805 PHOSPHORIC ACID SOLUTION, 8, III

Class (IMDG) : 8 - Corrosive substances

Packing group (IMDG) : III - substances presenting low danger

IATA

UN-No. (IATA) : 1805

Proper Shipping Name (IATA) : Phosphoric acid, solution

Transport document description (IATA) : UN 1805 Phosphoric acid, solution, 8, III

Class (IATA) : 8 - Corrosives

Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

15.1. National regulations

phosphoric acid (7664-38-2) (7664-38-2)

Listed on the Canadian DSL (Domestic Substances List)

hexafluorosilicic acid (16961-83-4)

Listed on the Canadian DSL (Domestic Substances List)

15.2. International regulations

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Not listed on the United States TSCA (Toxic Substances Control Act) inventory

phosphoric acid (7664-38-2) (7664-38-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

hexafluorosilicic acid (16961-83-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

SECTION 16: Other information

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SDS Major/Minor : None
Date of issue : 06/11/2020
Revision date : 06/11/2020
Other information : None.

Full text of H-statements:

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.

SDS Canada (GHS)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.