



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Canadian WHMIS 2015

Revision date 18-Dec-2019

Revision Number 10

1. Identification

Product identifier

Product Name MAP

Other means of identification

Product Code(s) 3034-1

Chemical name Phosphoric Acid, Monoammonium Salt

Synonyms Nova MAP
Ammonium dihydrogen phosphate
Monoammonium phosphate

Recommended use of the chemical and restrictions on use

Recommended use Fertilizer
Binder
Laboratory chemicals
Food additive
Feed additives
Processing aid
Cosmetic additive
Industrial intermediate
Flame retardant

Restrictions on use No information available

Details of the supplier of the safety data sheet

Initial Supplier Identifier

ICL
622 Emerson Road - Suite 500
St. Louis, Missouri 63141, USA
Tel:(314)983-7884 Fax:(314)983-7607
e-mail:msdsinfo@icl-group.com

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300
Medical: PROSAR 1-888-875-1685 (24HRS)

2. Hazard(s) identification

Classification

Not classified

Label elements

Hazard statements

Not classified.

Other information

No information available

3. Composition/information on ingredients

Substance

Chemical name	CAS No.	Weight-%
Ammonium Phospate Anhydrous	7722-76-1	100

4. First-aid measures

Description of first aid measures

Inhalation	Remove to fresh air.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.
Ingestion	If swallowed, wash mouth thoroughly with plenty of water. Get medical attention immediately. NOTE: Never give an unconscious person anything to drink

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically and supportively.

5. Fire-fighting measures

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Specific hazards arising from the chemical	May emit toxic fumes under fire conditions.
Hazardous combustion products	NOx. Ammonia. Phosphorus oxides.
Explosion data Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

Avoid generation of dust.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

Environmental precautions Should not be released into the environment. See Section 12 for additional Ecological Information.

Reference to other sections See section 8 for more information. See section 13 for more information.

7. Handling and storage**Precautions for safe handling**

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid generation of dust. Ensure adequate ventilation.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place away from incompatible materials (see Section 10).

8. Exposure controls/personal protection**Control parameters**

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical name	Alberta	British Columbia	Ontario	Quebec
Ammonium Phosphate Anhydrous 7722-76-1	-	-	-	-

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Chemical safety goggles.

Hand protection Protective gloves

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. In case of insufficient ventilation, wear suitable respiratory equipment.

Skin and body protection Wear suitable protective clothing.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Do not eat, smoke or drink where material is handled, processed or stored. Wash hands thoroughly after handling and before eating or smoking. Safety shower and eye bath should be provided.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Solid
Appearance	crystalline Powder
Color	white
Odor	None
Odor threshold	Not determined

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	4.5	
Melting point / freezing point	197°C	
Boiling point / boiling range	Not Applicable .	None known
Flash point	no data available	None known
Evaporation rate	no data available	
Flammability (solid, gas)	Not flammable .	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	no data available	
Lower flammability or explosive limits	no data available	
Vapor pressure	0.00147Pa (20°C)	
Vapor density	Not determined	
Relative density	1.81 g/cm ³	None known
Water solubility	370 g/l @ 25°C	
Solubility in other solvents	Practically not soluble @ 25 °C	
Partition coefficient	no data available	None known
Autoignition temperature	. Not self-ignitable	
Decomposition temperature	>197 °C	
Kinematic viscosity	no data available	None known
Dynamic viscosity	no data available	

Other information

Oxidizing properties	The structure indicates non oxidizing properties
Explosive properties	Product does not present an explosion hazard

Bulk density	1100 kg/m ³
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10. Stability and reactivity

Reactivity	Stable under normal conditions.
Chemical stability	Stable under normal conditions.
Possibility of Hazardous Reactions	Reacts with strong acids and alkali. Reacts with alkalis releasing ammonia. Reacts with oxidizing agents.
Conditions to avoid	To avoid thermal decomposition, do not overheat.
Incompatible materials	Oxidizing agents, acids and alkalis. Copper and copper alloys. Sodium hypochlorite.
Hazardous decomposition products	NO _x . Ammonia. Phosphorus oxides.

11. Toxicological information

Information on likely routes of exposure

Product Information

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

Component information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ammonium Phosphate Anhydrous 7722-76-1	>2000 mg/kg (Rat)	>5000 mg/kg (Rat)	>5 mg/L (Rat) 4h (read-across)

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/irritation Based on available data, the classification criteria are not met.

Respiratory or skin sensitization Not a skin sensitizer.

Germ cell mutagenicity Based on available data, the classification criteria are not met

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical name	ACGIH	IARC	NTP	US OSHA
Ammonium Phosphate Anhydrous 7722-76-1	-	-	-	-

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT - single exposure Based on available data, the classification criteria are not met.

STOT - repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Not expected.

12. Ecological information

Ecotoxicity . Not considered to be harmful to aquatic life.

Component information

Chemical name	Algae/aquatic plants	Fish	Crustacea	Toxicity to microorganisms
Ammonium Phosphate Anhydrous 7722-76-1	EC50: >100 mg/l (72h, Pseudokirchneriella subcapitata, read-across)	LC50: >85,9 mg/l (96h, Rainbow trout)	LC50: 1790 mg/l (72h, Daphnia carinata, read-across)	EC50: >100 mg/l (3h, Activated sludge, read-across)

Persistence and degradability Biodegradation is not relevant for inorganic salts.

Bioaccumulation Bioaccumulation is not likely to occur since this material is highly soluble in water.

Component information

Chemical name	Partition coefficient
Ammonium Phosphate Anhydrous 7722-76-1	<0.000011 mmHg

Mobility Not expected to adsorb on soil.

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations.

Contaminated packaging Dispose of contents/containers in accordance with local regulations.

14. Transport information

IMDG Not regulated

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not relevant

ICAO/IATA Not regulated

DOT Not regulated

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Canada - Significant New Activity Notices Not Applicable

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not Applicable

The Stockholm Convention on Persistent Organic Pollutants Not Applicable

The Rotterdam Convention Not Applicable

International Inventories

GHS hazardous component CAS registry numbers appearing in section 3 may differ from substances appearing in section 15 due to country or regional chemical inventory coverage requirements, however, remain in compliance with the inventory

TSCA Listed or exempted
DSL Listed or exempted
ENCS Listed or exempted
IECSC Listed or exempted

KECL	Listed or exempted
PICCS	Listed or exempted
AICS	Listed or exempted
NZIoC	Listed or exempted
TCSI	Listed or exempted
NCI	Listed or exempted
TECI	Listed or exempted
NSQ	Listed or exempted

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals
TCSI - Taiwan Chemical Substance Inventory
NCI - Vietnam National Chemicals Inventory
TECI - Thailand Inventory FDA Existing Chemicals
NSQ - Mexico National Inventory of Chemical Substances

16. Other information

NFPA	Health hazards 0	Flammability 0	Instability 0	Physical and chemical properties -
HMIS	Health hazards 0	Flammability 0	Physical hazards 0	Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
European Chemicals Agency
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGl(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

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Revision Note The symbol (*) in the margin of this SDS indicates that this line has been revised. **Although the information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof, we make no representations as to the completeness or accuracy thereof. Information is supplied to you upon the condition that the persons receiving the information will make their own determination as to its safety and suitability for their purposes prior to use. In no event will we be responsible for damages of any nature whatsoever resulting from the use of or reliance upon the information. In addition, we shall not be liable for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices or from any hazards inherent in the nature of the product.**

End of Safety Data Sheet