



SAFETY DATA SHEET

International Plant Food 4-6-32

Section 1. Identification

Product identifier : International Plant Food 4-6-32
Other means of identification : Product code: I000149
Product type : Granular solid.

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

Identified uses	
Fertilizer.	
Uses advised against	Reason
Not applicable.	Non-hazardous product.

Supplier's details : Rainbow Fertilizer LLC (a Division of Timac Agro USA)
1011 Oak Avenue
Americus, GA 31709

Company phone number:
1-800-403-2861 (Customer Service)

www.rainbowplantfoodproducts.com

Emergency telephone number (with hours of operation) : USA POISON CONTROL CENTER (24h/7d)
1-800-222-1222

Section 2. Hazard identification

Classification of the substance or mixture : Not classified.

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

GHS label elements

Hazard pictograms : **Not Applicable.**
No Aplicable.
Non applicable.

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Section 2. Hazard identification

- General** : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
- Prevention** : Not applicable.
- Response** : Not applicable.
- Storage** : Not applicable.
- Disposal** : Not applicable.
- Supplemental label elements** : None known.
- Other hazards which do not result in classification** : Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture.

Ingredient name	% (w/w)	CAS number
Potassium chloride	52	7447-40-7
Ammonium sulfate	10 - 18	7783-20-2
Calcium sulfate, dihydrate	9	10101-41-4
Zinc bis(dihydrogen phosphate)	5 - 6	13598-37-3
Sulfur	4.5	7704-34-9
Ammonium dihydrogen orthophosphate	3.32 - 3.4	7722-76-1
Boric acid	<1.2	10043-35-3
Diiron trioxide, Ferric oxide	<1	1309-37-1

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : Remove person to fresh air. No known significant effects. Seek medical attention for any signs of wheezing and/or breathing difficulties. For additional advice call the medical emergency number on this SDS or your poison center or medical provider.
- Skin contact** : No known significant effects. Rinse the affected areas with water. Remove contaminated clothing, jewelry, and shoes. Wash/clean items before reuse. Seek medical attention for persistent skin pain or irritation. For additional advice call the medical emergency number on this SDS or your poison center or doctor.
- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
- Inhalation** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

Section 4. First-aid measures

Skin contact : No known significant effects or critical hazards. May cause irritation due to mechanical action.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
irritation
watering
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing

Skin contact : No specific data.

Ingestion : No specific data.

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

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. Mouth-to-mouth resuscitation of oral exposure patients is not recommended. First-aiders with contaminated clothing should be properly decontaminated.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : The substance will not burn. Undergoes thermal decomposition at elevated temperatures to release toxic and flammable gases. Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : No specific fire or explosion hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
nitrogen oxides
sulfur oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Avoid contact with eyes. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Will dissolve and disperse in water. Reclaiming material may not be possible. If possible, recover spilled product and place in suitable containers for recycle, reuse, or disposal. Product will promote algae growth and may degrade water quality and taste. Notify downstream water users. Inform the relevant authorities if the product has caused adverse impacts (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Move containers from spill area. Avoid dust generation. Use appropriate equipment to put the spilled substance in a container for reuse or disposal. Dispose of via a licensed waste disposal contractor.
or
Recycle, if possible.

Large spill : No additional information.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. May form steep piles that can collapse without warning when stored in bulk. Avoid forming steep slopes when removing product. Ensure that bulk bags or smaller packaged products stored in tiers are stacked, racked, blocked, interlocked, or otherwise secured to prevent sliding, rolling, or collapse. Use caution when opening truck or railcar doors as product may have shifted during transport.

Must be stored in a dry location. Absorbs moisture on long-term storage under high humidity conditions. Store away from incompatible materials (see Section 10). When product is stored in sealable containers, keep container tightly closed and sealed until ready for use. Sealable containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Canadian Regulations: Potassium chloride	CA Alberta Provincial (Canada). Alberta TWA: 10 mg/m ³ Inhalable, 3 mg/m ³ Respirable, for Particles Not Otherwise Regulated.: 10 mg/m ³ 8 hours.
Ammonium sulfate	CA Alberta Provincial: Particulates not otherwise regulated (PNOR) TWA (8 hours), Total dust: 10 mg/m ³ ; Respirable fraction: 3 mg/m ³ .
Calcium sulfate, dihydrate	CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 10 mg/m ³ 8 hours. CA Ontario Provincial (Canada, 1/2013). TWA: 10 mg/m ³ 8 hours. Form: Inhalable fraction
Sulfur	CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 10 mg/m ³ 8 hours.
Ammonium dihydrogen orthophosphate	CA Alberta Provincial: Particulates not otherwise regulated (PNOR) TWA (8 hours), Total dust: 10 mg/m ³ ; Respirable fraction: 3 mg/m ³ .
Boric Acid	CA British Columbia Provincial (Canada, 4/2014). TWA: 2 mg/m ³ 8 hours. Form: Inhalable STEL: 6 mg/m ³ 15 minutes. Form: Inhalable CA Ontario Provincial (Canada, 1/2013). TWA: 2 mg/m ³ 8 hours. Form: Inhalable fraction STEL: 6 mg/m ³ 15 minutes. Form: Inhalable fraction
Diiron trioxide, Ferric oxide	CA British Columbia Provincial (Canada, 4/2014). TWA: 5 mg/m ³ , (as Fe) 8 hours. Form: Dust TWA: 5 mg/m ³ , (as Fe) 8 hours. Form: Fume STEL: 10 mg/m ³ , (as Fe) 15 minutes. Form: Fume TWA: 3 mg/m ³ 8 hours. Form: Respirable dust TWA: 10 mg/m ³ 8 hours. Form: Total dust CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 5 mg/m ³ , (as Fe) 8 hours. Form: Respirable CA Ontario Provincial (Canada, 1/2013). TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction CA Quebec Provincial (Canada, 1/2014). TWAEV: 5 mg/m ³ , (as Fe) 8 hours. Form: dust and fume CA Alberta Provincial (Canada, 6/2008). 8 hrs OEL: 10 mg/m ³ 8 hours. CA Ontario Provincial (Canada, 6/2008). TWAEV: 10 mg/m ³ 8 hours. Form: total dust

Section 8. Exposure controls/personal protection

U.S. Federal Regulations:

Potassium chloride

Ammonium sulfate

Calcium sulfate, dihydrate

Sulfur

Ammonium dihydrogen orthophosphate

Boric Acid

Diiron trioxide, Ferric oxide

OSHA PEL (United States).

TWA: 15 mg/m³, (Particulates not otherwise regulated (PNOR) Total particulates) 8 hours.

OSHA (United States):

Particulates not otherwise regulated (PNOR) TWA (8 hours), Total dust: 15 mg/m³; Respirable fraction: 5 mg/m³.

ACGIH TLV (United States, 4/2014).

TWA: 10 mg/m³ 8 hours. Form: Inhalable fraction

OSHA (United States):

Particulates not otherwise regulated (PNOR) TWA (8 hours), Total dust: 15 mg/m³; Respirable fraction: 5 mg/m³.

OSHA (United States):

Particulates not otherwise regulated (PNOR) TWA (8 hours), Total dust: 15 mg/m³; Respirable fraction: 5 mg/m³.

ACGIH TLV (United States, 4/2014).

TWA: 2 mg/m³ 8 hours. Form: Inhalable fraction

STEL: 6 mg/m³ 15 minutes. Form: Inhalable fraction

NIOSH REL (United States, 10/2013).

TWA: 5 mg/m³, (as Fe) 10 hours. Form: Dust and fumes

ACGIH TLV (United States, 4/2014).

TWA: 5 mg/m³ 8 hours. Form: Respirable fraction

OSHA PEL 1989 (United States, 3/1989).

TWA: 5 mg/m³ 8 hours. Form: Respirable fraction

TWA: 10 mg/m³ 8 hours. Form: Total dust
STEL: 10 ppm, (as Fe) 15 minutes. Form: Total particulates

OSHA PEL (United States, 2/2013).

TWA: 10 mg/m³ 8 hours.

Appropriate engineering controls

- : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls

- : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

- : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

- : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If operating conditions cause high dust concentrations to be produced, use dust goggles.

Skin protection

Section 8. Exposure controls/personal protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Recommended: leather work gloves
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Cotton or cotton/synthetic overalls or coveralls are normally suitable.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Granular solid.
- Color** : Gray.
- Odor** : Odorless.
- Odor threshold** : Not applicable.
- pH** : 6 [Conc. (% w/w): 10%]
- Melting point** : Not available.
- Boiling point** : Decomposes.
- Flash point** : [Product does not sustain combustion.]
- Fire point** : No flammable ingredients present.
- Evaporation rate** : Not applicable.
- Flammability (solid, gas)** : Not applicable. The substance will not burn. Undergoes thermal decomposition at elevated temperatures to release toxic and flammable gases.
- Lower and upper explosive (flammable) limits** : Not applicable.
- Vapor pressure** : Not applicable.
- Vapor density** : Not applicable.
- Relative density** : Not available.
- Solubility** : Easily soluble in the following materials: hot water.
Soluble in the following materials: cold water.
- Solubility in water** : Water soluble.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not applicable.
- Decomposition temperature** : Not available.
- Viscosity** : Not applicable.

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

Section 10. Stability and reactivity

Conditions to avoid : Absorbs moisture on long-term storage under high humidity conditions. Store in a well-ventilated, dry place. Protect from moisture.

Incompatible materials : Incompatible with halogens. Incompatible with copper alloys, copper, and zinc. Contact your sales representative or a metallurgical specialist to ensure compatibility with your equipment.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Potassium chloride	LD50 Oral	Rat	2600 mg/kg	-
Ammonium sulfate	LD50 Oral	Mouse - Male, Female	3040 mg/kg	-
	LD50 Oral	Rat	2840 mg/kg	-
	LD50 Oral	Rat - Male, Female	>2000 mg/kg	-
Calcium sulfate, dihydrate	LC50 Inhalation Dusts and mists	Rat - Male, Female	>3.26 mg/l CaSO ₄ .2H ₂ O	4 hours
	LD50 Oral	Rat - Male, Female	1581 mg/kg	-
Zinc bis(dihydrogen phosphate)	LD50 Oral	Rat	1990 mg/kg	-
Sulfur	LD Oral	Rat	>8437 mg/kg	-
Ammonium dihydrogen orthophosphate	LD50 Oral	Rat - Male, Female	>2000 mg/kg	-
Boric Acid	LD50 Oral	Rat - Male, Female	3450 mg/kg	-
Diiron trioxide	LD50 Oral	Rat	>5000 mg/kg	-

Conclusion/Summary : No known significant effects or critical hazards.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Potassium chloride	Eyes	Rabbit	0	24 hours 500 milligrams	-
Calcium sulfate, dihydrate	Skin	Rabbit	0	-	72 hours
	Eyes	Rabbit	0	-	72 hours
Ammonium sulfate	Skin	Rabbit	0	20 hours	24 hours
	Eyes	Rabbit	0	-	72 hours

Conclusion/Summary

Skin : No known significant effects or critical hazards.

Eyes : May cause irritation due to mechanical action.

Respiratory : May cause irritation due to mechanical action.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
Calcium sulfate, dihydrate	Skin	Guinea pig	Not sensitizing
Ammonium sulfate	Skin	Guinea pig	Not sensitizing

Conclusion/Summary

Skin : Non-sensitizer.

Respiratory : No known significant effects or critical hazards.

Mutagenicity

Section 11. Toxicological information

Product/ingredient name	Test	Experiment	Result
Potassium chloride	-	Experiment: In vivo Subject: Mammalian-Animal Cell: Somatic	Negative
Calcium sulfate, dihydrate	OECD 476 <i>In vitro</i> Mammalian Cell Gene Mutation Test	Experiment: In vitro Subject: Mammalian-Animal Cell: Germ	Negative
Ammonium sulfate	OECD 476	Experiment: In vitro Subject: Mammalian-Animal Cell: Somatic	Negative
	OECD 473	Experiment: In vitro Subject: Mammalian-Animal Cell: Germ	Negative

Conclusion/Summary : No known significant effects or critical hazards.

Carcinogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Potassium chloride	Negative - Oral - TDLo	Rat - Male	1820 mg/kg	-
Ammonium sulfate	Negative - Oral - TCLo	Rat - Male, Female	1288 mg/kg	2 years; 7 days per week

Conclusion/Summary : No known significant effects or critical hazards.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
Calcium sulfate, dihydrate	Negative	Negative	Negative	Rat - Male, Female	Oral	-
Ammonium sulfate	Negative	Negative	-	Mouse - Male, Female	Oral: 5000 mg/ kg	-

Conclusion/Summary : No known significant effects or critical hazards.

Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Ammonium sulfate	Negative - Oral	Rat - Male, Female	1500 mg/kg	-

Conclusion/Summary : No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Inhalation.

Potential acute health effects

Eye contact : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

Inhalation : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

Skin contact : No known significant effects or critical hazards. May cause irritation due to mechanical action.

Ingestion : No known significant effects or critical hazards.

Section 11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: No specific data.
Ingestion	: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects	: May cause irritation due to mechanical action.
Potential delayed effects	: None identified.

Long term exposure

Potential immediate effects	: None identified.
Potential delayed effects	: None identified.

Potential chronic health effects

Conclusion/Summary	: No known significant effects or critical hazards.
General	: Irritating to the eyes.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Potassium chloride	Acute EC50 1337000 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute EC50 9.24 g/L Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Acute EC50 83000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 9.68 mg/l Fresh water	Crustaceans - Pseudosida ramosa - Neonate	48 hours
Calcium sulfate, dihydrate	Acute LC50 435000 µg/l Fresh water	Fish - Gambusia affinis - Adult	96 hours
	EC50 >79 mg/l	Algae	72 hours
	EC50 >79 mg/l	Daphnia	48 hours
	EC50 >790 mg/l	Micro-organism	3 hours
Ammonium sulfate	Acute LC50 >1970 mg/l	Fish	96 hours
	Acute LC50 2.6 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Young	48 hours
	Acute LC50 14000 µg/l Fresh water	Daphnia - Daphnia magna - Young	48 hours
	Acute LC50 53 mg/l	Fish - Oncorhynchus mykis	96 hours
	Chronic NOEC 143 µg/l Marine water	Fish - Salmo salar - Post-smolt	5 weeks

Conclusion/Summary	: No known significant effects or critical hazards.
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Persistence and degradability

Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Calcium sulfate, dihydrate	-	-	Readily

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	TDG Classification	DOT Classification	Mexico Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.
Additional information	Classification per the current revision, Transportation of Dangerous Goods Regulation, Part 2, Sec 2.3.	-	-	-	-

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 14. Transport information

Transport in bulk according to Annex II of MARPOL and the IBC Code : Not available.

Section 15. Regulatory information

Canadian lists

Canadian NPRI : The following components are listed: Total of ammonia (NH₃ — CAS RN 7664-41-7) and the ammonium ion (NH₄⁺ — CAS RN 14798-03-9) in solution, expressed as ammonia.
Zinc (and its compounds)

CEPA Toxic substances : None of the components are listed.

Canada inventory : All components are listed or exempted.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : Not determined.
China : Not determined.
Europe : Not determined.
Japan : Not determined.
Malaysia : Not determined.
New Zealand : Not determined.
Philippines : Not determined.
Republic of Korea : Not determined.
Taiwan : Not determined.
Turkey : Not determined.

U.S. Federal Regulations: : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined
TSCA 8(b) Active inventory: All components are listed or exempted.
Clean Water Act (CWA) 307: Zinc oxide

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

Section 15. Regulatory information

SARA 302/304 Composition/information on ingredients

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Not applicable.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Ammonium sulfate	7783-20-2	10 - 18
	Zinc bis(dihydrogen phosphate)	13598-37-3	5 - 6
	Ammonium dihydrogen orthophosphate	7722-76-1	4
Supplier notification	Ammonium sulfate	7783-20-2	10 - 18
	Zinc bis(dihydrogen phosphate)	13598-37-3	5 - 6
	Ammonium dihydrogen orthophosphate	7722-76-1	4

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

- Massachusetts** : The following components are listed: Ammonium sulfate; sulfur
- New York** : None of the components are listed.
- New Jersey** : The following components are listed: Zinc oxide; sulfur
- Pennsylvania** : The following components are listed: Sulfuric acid diammonium salt; Zinc oxide; sulfur
- California Prop. 65** : Not applicable – This product is not registered for sale into the State of California and has not been evaluated for Prop 65 notification requirements.

Section 16. Other information

History

Date of issue/Date of revision : 3/15/2022

Date of previous issue : 5/2/2019

Version : 2.1

📌 Indicates information that has changed from previously issued version.

Key to abbreviations

- : ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 UN = United Nations
 HPR = Hazardous Products Regulations

Procedure used to derive the classification

Classification	Justification
Not classified.	Calculation method

References

- : Transportation of Dangerous Goods Act and Clear Language Regulations, current edition at time of SDS preparation, Transport Canada;
 Hazardous Products Act and Regulations, current revision at time of SDS preparation, Health Canada;
 Domestic Substances List, current revision at time of SDS preparation, Environment Canada;
 29 CFR Part 1910, current revision at time of SDS preparation, U.S. Occupational Safety and Health Administration;

Section 16. Other information

40 CFR Parts 1-799, current revision at time of SDS preparation, U.S. Environmental Protection Agency;
 49 CFR Parts 1-199, current revision at time of SDS preparation, U.S. Department of Transport;
 Mexican Official Standard NOM-018-STPS-2015, Harmonised System for the Identification and Communication of Hazards and Risks by Hazardous Chemicals in the Workplace;
 NORMA Oficial Mexicana NOM-010-STPS-2014, Agentes químicos contaminantes del ambiente laboral-Reconocimiento, evaluación y control.
 Mexican Official Standard NOM-002-SCT / 2011, List of the most commonly transported hazardous substances and materials;
 Threshold Limit Values for Chemical Substances, current edition at time of SDS preparation, American Conference of Governmental Industrial Hygienists;
 NFPA 400, National Fire Codes, National Fire Protection Association, current edition at time of SDS preparation;
 NFPA 704, National Fire Codes, National Fire Protection Association, current edition at time of SDS preparation;
 Corrosion Data Survey, Sixth Edition, 1985, National Association of Corrosion Engineers;
 ERG 2016, Emergency Response Guidebook, U.S. Department of Transport, Transport Canada, and the Secretariat of Transportation and Communications of Mexico
 Hazardous Substances Data Bank, current revision at time of SDS preparation, National Library of Medicine, Bethesda, Maryland
 Integrated Risk Information System, current revision at time of SDS preparation, U.S. Environmental Protection Agency, Washington, D.C.
 Pocket Guide to Chemical Hazards, current revision at time of SDS preparation, National Institute for Occupational Safety and Health, Cincinnati, Ohio ;
 Agency for Toxic Substances and Disease Registry Databank, current revision at time of SDS preparation, U.S. Department of Health and Human Services, Atlanta, Georgia
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Notice to reader

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