SAFETY DATA SHEET

1. Identification

Product identifier	**Nitrate Reagent Powder Pillows**
Other means of identification	Not available.
Recommended use	Water Test Kit
Recommended restrictions	None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name	Pro Products LLC
Address	6714 Pointe Inverness Way Suite 200 Fort Wayne IN 46804-7935 United States
Telephone	260-483-2519
E-mail	Not available.
Emergency phone number	1-800-424-9300 (CHEMTREC)
Supplier	See above.

2. Hazard identification

Physical hazards	Not classified.	
Health hazards	Acute toxicity, inhalation	Category 3
	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
	Germ cell mutagenicity	Category 2
	Carcinogenicity	Category 1B
	Reproductive toxicity	Category 2
	Specific target organ toxicity, repeated exposure	Category 1
Environmental hazards	Not classified.	
WHMIS 2015 defined hazards	Not classified	

Label elements

Signal word	Danger
Hazard statement	Toxic if inhaled. Causes severe skin burns and eye damage. Suspected of causing genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure.

Precautionary statement

Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product. Do not breathe dust. Wear protective gloves, protective clothing, eye protection and face protection. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling.
Response	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. Specific treatment (see information on this label). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical attention.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal	Dispose of container in accordance with local, regional, national and international regulations.

WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC)	None known
WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC)	None known
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	54% of the mixture consists of component(s) of unknown acute inhalation toxicity.

3. Composition/Information on ingredients

Mixture

Chemical name	Common name and synonyms	CAS number	%
Ammonium chloride		12125-02-9	15-40*
Cadmium		7440-43-9	3-7*
Copper (II) sulfate pentahydrate		7758-99-8	0.1-1*
Dipotassium Disulphate		7790-62-7	3-7*
Manganese Sulfate Pentahydrate		10034-96-5	3-7*

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments

US GHS: The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.
*CANADA GHS: The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.
Skin contact	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Specific treatment (see information on this label). Wash contaminated clothing before reuse.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
Ingestion	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Coughing. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Symptoms may be delayed.
General information	IF exposed or concerned: Get medical advice. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Use water spray to cool unopened containers.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.
Hazardous combustion products	May include and are not limited to: Oxides of nitrogen. Ammonia. Hydrogen chloride. Oxides of sulfur.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe dust. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Collect dust using a vacuum cleaner equipped with HEPA filter. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk.

Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground. Do not discharge into lakes, streams, ponds or public waters.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimize dust generation and accumulation. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Use only outdoors or in a well-ventilated area. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children.

8. Exposure controls/Personal protection

Occupational exposure limits

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value	Form
Ammonium chloride (CAS 12125-02-9)	STEL	20 mg/m3	Fume.
	TWA	10 mg/m3	Fume.
Cadmium (CAS 7440-43-9)	TWA	0.01 mg/m3	
Manganese Sulfate Pentahydrate (CAS 10034-96-5)	TWA	0.2 mg/m3	

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form
Ammonium chloride (CAS 12125-02-9)	STEL	20 mg/m3	Fume.
	TWA	10 mg/m3	Fume.
Cadmium (CAS 7440-43-9)	TWA	0.01 mg/m3	
		0.002 mg/m3	Respirable.
Manganese Sulfate Pentahydrate (CAS 10034-96-5)	TWA	0.2 mg/m3	Total
		0.02 mg/m3	Respirable.

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value	Form
Ammonium chloride (CAS 12125-02-9)	STEL	20 mg/m3	Fume.
	TWA	10 mg/m3	Fume.
Cadmium (CAS 7440-43-9)	TWA	0.01 mg/m3	
		0.002 mg/m3	Respirable fraction.

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value	Form
Copper (II) sulfate pentahydrate (CAS 7758-99-8)	TWA	1 mg/m3	Dust and mist.
		0.2 mg/m3	Fume.
Manganese Sulfate Pentahydrate (CAS 10034-96-5)	TWA	0.1 mg/m3	Inhalable fraction.
		0.02 mg/m3	Respirable fraction.

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value	Form
Ammonium chloride (CAS 12125-02-9)	STEL	20 mg/m3	Fume.
	TWA	10 mg/m3	Fume.
Cadmium (CAS 7440-43-9)	TWA	0.01 mg/m3	
		0.002 mg/m3	Respirable fraction.
Copper (II) sulfate pentahydrate (CAS 7758-99-8)	TWA	0.2 mg/m3	Fume.
Manganese Sulfate Pentahydrate (CAS 10034-96-5)	TWA	0.1 mg/m3	Inhalable fraction.

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

Components	Type	Value	Form
Ammonium chloride (CAS 12125-02-9)	STEL	20 mg/m3	Fume.
	TWA	10 mg/m3	Fume.
Cadmium (CAS 7440-43-9)	TWA	0.025 mg/m3	
Manganese Sulfate Pentahydrate (CAS 10034-96-5)	TWA	0.2 mg/m3	Fume, total dust.

Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

Components	Type	Value	Form
Ammonium chloride (CAS 12125-02-9)	15 minute	20 mg/m3	Fume.
	8 hour	10 mg/m3	Fume.
Cadmium (CAS 7440-43-9)	15 minute	0.03 mg/m3	Total
		0.006 mg/m3	Respirable fraction.
	8 hour	0.01 mg/m3	Total
		0.002 mg/m3	Respirable fraction.
Manganese Sulfate Pentahydrate (CAS 10034-96-5)	15 minute	0.6 mg/m3	
	8 hour	0.2 mg/m3	

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Components	Type	Value
Cadmium (CAS 7440-43-9)	TWA	0.005 mg/m3

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Manganese Sulfate Pentahydrate (CAS 10034-96-5)	Ceiling	5 mg/m3

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value	Form
Cadmium (CAS 7440-43-9)	Ceiling	0.6 mg/m3	Dust.
		0.3 mg/m3	Fume.
	TWA	0.2 mg/m3	Dust.
		0.1 mg/m3	Fume.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Ammonium chloride (CAS 12125-02-9)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Ammonium chloride (CAS 12125-02-9)	STEL	20 mg/m3	Fume.
	TWA	10 mg/m3	Fume.
Cadmium (CAS 7440-43-9)	TWA	0.01 mg/m3	
		0.002 mg/m3	Respirable fraction.
Copper (II) sulfate pentahydrate (CAS 7758-99-8)	TWA	1 mg/m3	Dust and mist.
		0.2 mg/m3	Fume.
Manganese Sulfate Pentahydrate (CAS 10034-96-5)	TWA	0.1 mg/m3	Inhalable fraction.
		0.02 mg/m3	Respirable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Ammonium chloride (CAS 12125-02-9)	STEL	20 mg/m3	Fume.
	TWA	10 mg/m3	Fume.
Copper (II) sulfate pentahydrate (CAS 7758-99-8)	TWA	1 mg/m3	Dust and mist.
		0.1 mg/m3	Fume.
Manganese Sulfate Pentahydrate (CAS 10034-96-5)	STEL	3 mg/m3	Fume.
	TWA	1 mg/m3	Fume.

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Cadmium (CAS 7440-43-9)	5 µg/g	Cadmium	Creatinine in urine	*
	5 µg/l	Cadmium	Blood	*

* - For sampling details, please see the source document.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection

Impervious gloves. Confirm with reputable supplier first.

Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. As required by employer code.

Respiratory protection

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2).

Thermal hazards

Not applicable.

General hygiene considerations

Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. When using do not eat or drink.

9. Physical and chemical properties

Appearance	Solid.
Physical state	Solid.
Form	Powder.
Color	grey
Odor	Not available.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Pour point	Not available.
Specific gravity	Not available.
Partition coefficient (n-octanol/water)	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and reactivity

Reactivity	This product may react with strong oxidizing agents.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Do not mix with other chemicals.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	May include and are not limited to: Oxides of nitrogen. Hydrogen chloride. Ammonia. Oxides of sulfur.

11. Toxicological information

Routes of exposure	Eye, Skin contact, Inhalation, Ingestion.
Information on likely routes of exposure	
Ingestion	Causes digestive tract burns. May cause stomach distress, nausea or vomiting.
Inhalation	Toxic if inhaled. May cause damage to organs through prolonged or repeated exposure by inhalation.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.

Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Dusts may irritate the respiratory tract, skin and eyes. Coughing.

Information on toxicological effects

Acute toxicity Toxic if inhaled.

Components	Species	Test Results
Ammonium chloride (CAS 12125-02-9)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg, 24 Hours, ECHA
Inhalation		
LC50	Not available	
Oral		
LD50	Rat	1410 mg/kg, ECHA
Cadmium (CAS 7440-43-9)		
Acute		
Dermal		
LD50	Not available	
Inhalation		
LC50	Rat	56 mg/m³, 4 Hours, ECHA
Oral		
LD50	Rat	2330 mg/kg, ECHA
Copper (II) sulfate pentahydrate (CAS 7758-99-8)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg, 24 Hours, ECHA
Inhalation		
LC50	Not available	
Oral		
LD50	Rat	481 mg/kg, ECHA
Dipotassium Disulphate (CAS 7790-62-7)		
Acute		
Dermal		
LD50	Not available	
Inhalation		
LC50	Rat	375 mg/m3, 4 Hours, ECHA
Oral		
LD50	Rat	2140 mg/kg, ECHA
Manganese Sulfate Pentahydrate (CAS 10034-96-5)		
Acute		
Dermal		
LD50	Not available	
Inhalation		
LC50	Rat	> 4.5 mg/L, 4 Hours, ECHA
Oral		
LD50	Mouse	2330 mg/kg, ECHA
	Rat	1470 mg/kg, ECHA

Skin corrosion/irritation	Causes severe skin burns and eye damage.
Exposure minutes	Not available.
Erythema value	Not available.
Oedema value	Not available.
Serious eye damage/eye irritation	Causes serious eye damage.
Corneal opacity value	Not available.
Iris lesion value	Not available.

Conjunctival reddening value Not available.

Conjunctival oedema value Not available.

Recover days Not available.

Respiratory or skin sensitization

Canada - Alberta OELs: Irritant

Ammonium chloride (CAS 12125-02-9) Irritant

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Mutagenicity Suspected of causing genetic defects.

Carcinogenicity May cause cancer. See below.

ACGIH Carcinogens

Cadmium (CAS 7440-43-9) A2 Suspected human carcinogen.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Cadmium (CAS 7440-43-9)

Canada - Alberta OELs: Carcinogen category

Cadmium (CAS 7440-43-9) Suspected human carcinogen.

Canada - Manitoba OELs: carcinogenicity

Cadmium (CAS 7440-43-9) Suspected human carcinogen.

Canada - Quebec OELs: Carcinogen category

Cadmium (CAS 7440-43-9) Suspected carcinogenic effect in humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Cadmium (CAS 7440-43-9) Volume 58, Volume 100C 1 Carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Cadmium (CAS 7440-43-9) Cancer

US NTP Report on Carcinogens: Known carcinogen

Cadmium (CAS 7440-43-9) Known To Be Human Carcinogen.

Reproductive toxicity Suspected of damaging fertility or the unborn child.

Teratogenicity Not available.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard Not an aspiration hazard.

Chronic effects Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity See below

Ecotoxicological data

Components		Species	Test Results
Ammonium chloride (CAS 12125-02-9)			
Aquatic			
Crustacea	EC50	American lobster (Homarus americanus)	0.237 - 0.288 mg/L, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.42 - 0.56 mg/L, 96 hours
Cadmium (CAS 7440-43-9)			
Crustacea	EC50	Daphnia	0.024 mg/L, 48 Hours
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	0.025 mg/L, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.002 - 0.003 mg/L, 96 hours
Copper (II) sulfate pentahydrate (CAS 7758-99-8)			
Crustacea	EC50	Daphnia	0.187 mg/L, 48 Hours
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	0.006 - 0.007 mg/L, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus)	0.66 - 1.15 mg/L, 96 hours

Components		Species	Test Results
Manganese Sulfate Pentahydrate (CAS 10034-96-5)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	7.09 - 9.36 mg/L, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	24.3 - 38.9 mg/L, 96 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Mobility in general Not available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

Transport of Dangerous Goods (TDG) Proof of Classification Classification Method: Classified as per Part 2, Sections 2.1 – 2.8 of the Transportation of Dangerous Goods Regulations. If applicable, the technical name and the classification of the product will appear below.

U.S. Department of Transportation (DOT)

Basic shipping requirements:

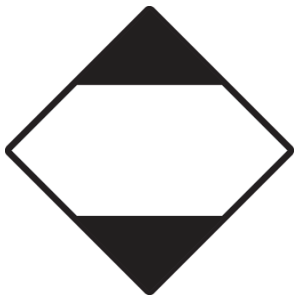
UN number	UN2923
Proper shipping name	Corrosive solids, toxic, n.o.s.
Technical name	Dipotassium Disulphate
Technical name	Cadmium
Hazard class	Limited Quantity - US
Packing group	II
Packaging exceptions	<2.2 pounds - Limited Quantity

Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

UN number	UN2923
Proper shipping name	CORROSIVE SOLID, TOXIC, N.O.S.
Technical name	Dipotassium Disulphate
Technical name	Cadmium
Hazard class	Limited Quantity - Canada
Packing group	II
Special provisions	16
Packaging exceptions	<1kg - Limited Quantity

DOT; TDG



15. Regulatory information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Canada CEPA Schedule I: Listed substance

Ammonium chloride (CAS 12125-02-9)	Listed.
Cadmium (CAS 7440-43-9)	Listed.

Canada Priority Substances List (Second List): Listed substance

Ammonium chloride (CAS 12125-02-9)	Listed.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

WHMIS 2015 Exemptions Not applicable

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Ammonium chloride (CAS 12125-02-9)	Listed.
Cadmium (CAS 7440-43-9)	Listed.
Manganese Sulfate Pentahydrate (CAS 10034-96-5)	Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Cadmium (CAS 7440-43-9)	Cancer Lung Kidney Acute toxicity

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance No

Classified hazard categories
Acute toxicity (any route of exposure)
Serious eye damage or eye irritation
Germ cell mutagenicity
Carcinogenicity
Reproductive toxicity
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Cadmium	7440-43-9	3-7*
Copper (II) sulfate pentahydrate	7758-99-8	0.1-1*
Manganese Sulfate Pentahydrate	10034-96-5	3-7*

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Cadmium (CAS 7440-43-9)
Manganese Sulfate Pentahydrate (CAS 10034-96-5)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

US state regulations See below

US - California Hazardous Substances (Director's): Listed substance

Ammonium chloride (CAS 12125-02-9)	Listed.
Cadmium (CAS 7440-43-9)	Listed.
Copper (II) sulfate pentahydrate (CAS 7758-99-8)	Listed.
Manganese Sulfate Pentahydrate (CAS 10034-96-5)	Listed.

US - Illinois Chemical Safety Act: Listed substance

Ammonium chloride (CAS 12125-02-9)
Cadmium (CAS 7440-43-9)
Manganese Sulfate Pentahydrate (CAS 10034-96-5)

US - Louisiana Spill Reporting: Listed substance

Ammonium chloride (CAS 12125-02-9)	Listed.
Cadmium (CAS 7440-43-9)	Listed.
Manganese Sulfate Pentahydrate (CAS 10034-96-5)	Listed.

US - Michigan Critical Materials Register: Parameter number

Cadmium (CAS 7440-43-9)

Copper (II) sulfate pentahydrate (CAS 7758-99-8)

US - Minnesota Haz Subs: Listed substance

Ammonium chloride (CAS 12125-02-9)	Listed.
Cadmium (CAS 7440-43-9)	Listed.
Manganese Sulfate Pentahydrate (CAS 10034-96-5)	Listed.

US - North Carolina Toxic Air Pollutants: Listed substance

Cadmium (CAS 7440-43-9)
Manganese Sulfate Pentahydrate (CAS 10034-96-5)

US - Texas Effects Screening Levels: Listed substance

Ammonium chloride (CAS 12125-02-9)	Listed.
Cadmium (CAS 7440-43-9)	Listed.
Copper (II) sulfate pentahydrate (CAS 7758-99-8)	Listed.

US - Washington Chemical of High Concern to Children: Listed substance

Cadmium (CAS 7440-43-9)

US. Massachusetts RTK - Substance List

Ammonium chloride (CAS 12125-02-9)
Cadmium (CAS 7440-43-9)
Copper (II) sulfate pentahydrate (CAS 7758-99-8)

US. New Jersey Worker and Community Right-to-Know Act

Ammonium chloride (CAS 12125-02-9)
Cadmium (CAS 7440-43-9)
Copper (II) sulfate pentahydrate (CAS 7758-99-8)
Manganese Sulfate Pentahydrate (CAS 10034-96-5)

US. Pennsylvania Worker and Community Right-to-Know Law

Ammonium chloride (CAS 12125-02-9)
Cadmium (CAS 7440-43-9)
Manganese Sulfate Pentahydrate (CAS 10034-96-5)

US. Rhode Island RTK

Ammonium chloride (CAS 12125-02-9)
Cadmium (CAS 7440-43-9)

US. California Proposition 65

WARNING: This product can expose you to chemicals including Cadmium, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Cadmium (CAS 7440-43-9)	Listed: October 1, 1987

California Proposition 65 - CRT: Listed date/Developmental toxin

Cadmium (CAS 7440-43-9)	Listed: May 1, 1997

California Proposition 65 - CRT: Listed date/Male reproductive toxin

Cadmium (CAS 7440-43-9)	Listed: May 1, 1997

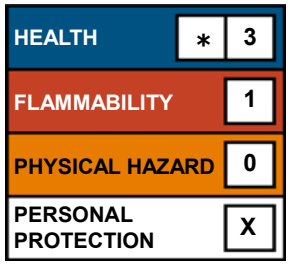
Inventory status

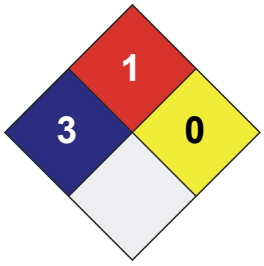
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0





Disclaimer

The data contained in this material safety data sheet was obtained from sources that were technically accurate, reliable, and state of the art when this document was prepared. If data was unavailable to complete certain sections, the absence of that data is identified in this document. Because the supplier cannot know the exact circumstances during actual use of this product, other hazards, exposure scenarios, disposal considerations, and regulations may apply and it is the responsibility of the user to read and understand the product label and this document before use. Do not use the product for purposes other than those stated in Section 1.

Issue date 10-August-2021

Version #	03
Effective date	10-August-2021
Prepared by	Dell Tech Laboratories Ltd. Phone: (519) 858-5021
Further information	Not available.
Other information	For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.