

1. Product and Company Identification

Product identifier	ProAcqua™ Flow
Other means of identification	ProAcqua Translok
Synonyms	Proprietary blend of plant nutrients
Recommended use	Source of plant nutrients for food and non-food crops
Recommended restrictions	None known.
Manufacturer information	Compass Minerals USA Inc. 9900 West 109th Street, Suite 100 Overland Park, KS 66210 US Phone (913) 344-9200
Supplier	Compass Minerals Manitoba Inc. 6700 Century Avenue Mississauga L5N 6A4 CA http://www.compassminerals.com/ Phone (905) 567-0231 techservicesrequests @compassminerals.com
CHEMTREC	1-800-424-9300
CANUTEC	1-613-996-6666

2. Hazards Identification

Physical hazards	Oxidizing solids	Category 3
Health hazards	Reproductive toxicity	Category 1B
Environmental hazards	Not classified.	
WHMIS 2015 defined hazards	Not classified	
Label elements		



Signal word	Danger
Hazard statement	May intensify fire; oxidizer. May damage fertility or the unborn child.
Precautionary statement	
Prevention	Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing and other combustible materials. Wear protective gloves/protective clothing/eye protection/face protection.
Response	In case of fire: Use appropriate media to extinguish. IF exposed or concerned: Get medical advice/attention.
Storage	Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/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	None.

3. Composition/Information on Ingredients

Mixture

Chemical name	Common name and synonyms	CAS number	%
Boric acid salt		HMIRA 11561	HMIRA 11561
Nitrate salt #1		HMIRA 11561	HMIRA 11561
Nitrate salt #2		HMIRA 11561	HMIRA 11561

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

Composition comments The filing date associated with this trade secret exemption is 2017-05-31

4. First Aid Measures

Inhalation	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
Skin contact	Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.
Eye contact	Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.
Ingestion	Rinse mouth. Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Obtain medical attention.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Symptoms may be delayed.
General information	IF exposed or concerned: Get medical advice/attention. 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. Take off all contaminated clothing immediately. Contact with combustible material may cause fire. Wash contaminated clothing before reuse. 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	Greatly increases the burning rate of combustible materials. Containers may explode when heated. 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	Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers.
Specific methods	Cool containers exposed to flames with water until well after the fire is out.
General fire hazards	May intensify fire; oxidizer. Contact with combustible material may cause fire.
Hazardous combustion products	May include and are not limited to: Oxides of magnesium.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. 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	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Ventilate the contaminated area. Before attempting clean up, refer to hazard data given above. Use broom or dry vacuum to collect material for proper disposal without raising dust. Rinse area with water. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Wear appropriate protective equipment and clothing during clean-up. For waste disposal, see section 13 of the SDS.
Environmental precautions	Do not discharge into lakes, streams, ponds or public waters.

7. Handling and Storage

Precautions for safe handling	Do not handle until all safety precautions have been read and understood. Minimize dust generation and accumulation. Provide adequate ventilation. Wear appropriate personal protective equipment. Pregnant or breastfeeding women must not handle this product. Avoid prolonged exposure. Observe good industrial hygiene practices. Wash thoroughly after handling. When handling, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.
Conditions for safe storage, including any incompatibilities	Store locked up. Keep away from heat. Do not store near combustible materials. 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
Boric acid salt (CAS HMIRA 11561)	STEL	3 ppm
	TWA	1 mg/m3

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

Components	Type	Value	Form
Boric acid salt (CAS HMIRA 11561)	STEL	6 mg/m3	Inhalable fraction.
	TWA	2 mg/m3	Inhalable fraction.

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

Components	Type	Value	Form
Boric acid salt (CAS HMIRA 11561)	STEL	6 mg/m3	Inhalable fraction.
	TWA	2 mg/m3	Inhalable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Boric acid salt (CAS HMIRA 11561)	STEL	6 mg/m3	Inhalable fraction.
	TWA	2 mg/m3	Inhalable fraction.

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Ensure adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields.

Skin protection

Hand protection Wear suitable gloves. Confirm with a reputable supplier first.

Other As required by employer code.

Respiratory protection Wear dust mask.

Thermal hazards Not applicable.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. When using do not eat or drink.

9. Physical and Chemical Properties

Appearance	Powder
Physical state	Solid.
Form	Solid.
Color	Yellow
Odor	Not available.

Odor threshold	Not available.
pH	4.4 (10% solution)
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)	300 g/l
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Bulk density	1.05 g/cm ³
Explosive properties	Not explosive.
Oxidizing properties	May intensify fire; oxidizer.

10. Stability and Reactivity

Reactivity	May react with incompatible materials.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Heat. Do not mix with other chemicals.
Incompatible materials	Combustible material. Reducing agents. Acids. Bases.
Hazardous decomposition products	May include and are not limited to: Oxides of magnesium.

11. Toxicological Information

Routes of exposure	Eye, Skin contact, Inhalation, Ingestion.
Information on likely routes of exposure	
Ingestion	May cause stomach distress, nausea or vomiting.
Inhalation	Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.
Information on toxicological effects	
Acute toxicity	

Components	Species	Test Results
Boric acid salt (CAS HMIRA 11561)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg > 2000 mg/kg, ECHA > 2000 mg/kg, 24 Hours
<i>Inhalation</i>		
LC50	Rat	> 2 mg/l/4h, ECHA > 2 mg/L, 5 Hours > 2 mg/L, 4 Hours
<i>Oral</i>		
LD50	Dog	2000 mg/kg
	Guinea pig	5300 mg/kg
	Mouse	3450 mg/kg
	Rat	> 250 mg/kg 5560 mg/kg, ECHA 2500 mg/kg
Nitrate salt #1 (CAS HMIRA 11561)		
Acute		
<i>Dermal</i>		
LD50	Rat	> 5000 mg/kg, ECHA > 5000 mg/kg, 24 Hours
<i>Inhalation</i>		
LC50	Rat	> 0.5 mg/l/4h, ECHA > 0.5 mg/L, 4 Hours
<i>Oral</i>		
LD50	Rabbit	1901 mg/kg, ECHA 1166 mg/kg, HSDB
	Rat	> 2000 mg/kg 3750 mg/kg, ECHA
Nitrate salt #2 (CAS HMIRA 11561)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	7940 mg/kg
	Rat	> 5000 mg/kg, ECHA > 5000 mg/kg, 24 Hours
<i>Oral</i>		
LD50	Mouse	2085 mg/kg, ECHA
	Rat	4500 mg/kg, HSDB 2950 mg/kg 2800 mg/kg, HSDB 2217 mg/kg, Sigma Aldrich
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Exposure minutes	Not available.	
Erythema value	Not available.	
Oedema value	Not available.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.	
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

Boric acid salt (CAS HMIRA 11561) Irritant

Respiratory sensitization Not a respiratory sensitizer.

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

Mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity See below.

Canada - Manitoba OELs: carcinogenicity

BORATE COMPOUNDS, INORGANIC, INHALABLE FRACTION (CAS HMIRA 11561) Not classifiable as a human carcinogen.

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

Not listed.

Reproductive toxicity May damage fertility or the unborn child.

Teratogenicity Not available.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological Information

Ecotoxicity See below

Ecotoxicological data

Components	Species	Test Results
Nitrate salt #1 (CAS HMIRA 11561)		
Aquatic		
Fish	LC50	Western mosquitofish (<i>Gambusia affinis</i>) 22.5 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, global warming potential) are expected from this component.

13. Disposal Considerations

Disposal instructions	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	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 In accordance with Part 2.2.1 (SOR/2014-152) of the Transportation of Dangerous Goods Regulations, we certify that the classification of this product is correct as of the SDS date of issue.

General

IMDG:
Special Provisions: 223, 274, 900
Limited and Excepted Quantity Provisions: Limited Quantities: 5 kg
Limited and Excepted Quantity Provisions: Excepted Quantities: E1
Packing: Instructions: P002, LP02
IBC: Instructions: IBC08
IBC: Provisions: B3

IATA:
Passenger and Cargo Aircraft: Limited Quantity: Pkg Inst: Y546
Passenger and Cargo Aircraft: Limited Quantity: Max Net Qty/Pkg: 10 kg
Passenger and Cargo Aircraft: Pkg Inst: 559
Passenger and Cargo Aircraft: Max Net/Qty Pkg: 25 kg
Cargo Aircraft Only: Pkg Inst: 563
Cargo Aircraft Only: Max Net Qty/Pkg: 100 kg

U.S. Department of Transportation (DOT)

Basic shipping requirements:

UN number UN1479
Proper shipping name Oxidizing solid, n.o.s.
Hazard class 5.1
Packing group III
Special provisions 62, 148, IB8, IP3, T1, TP33
Packaging exceptions 152
Packaging non bulk 213
Packaging bulk 240

Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

UN number UN1479
Proper shipping name OXIDIZING SOLID, N.O.S.
Hazard class 5.1
Packing group III
Special provisions 16, 68

IATA/ICAO (Air)

Basic shipping requirements:

UN number UN1479
Proper shipping name Oxidizing solid, n.o.s.
Hazard class 5.1
Packing group III
ERG code 5L

IMDG (Marine Transport)

Basic shipping requirements:

UN number UN1479
Proper shipping name OXIDIZING SOLID, N.O.S.
Hazard class 5.1
Packing group III

DOT



IATA; IMDG; 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.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

WHMIS 2015 Exemptions Controlled

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)

Not listed.

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

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - Yes

SARA 302 Extremely hazardous substance No

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Nitrate salt #2	HMIRA 11561	HMIRA 11561

Other federal regulations

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

Not regulated.

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

Not regulated.

US state regulations See below

US - New Jersey RTK - Substances: Listed substance

Boric acid salt (CAS HMIRA 11561)

Nitrate salt #1 (CAS HMIRA 11561)

Nitrate salt #2 (CAS HMIRA 11561)

US - Texas Effects Screening Levels: Listed substance

Nitrate salt #1 (CAS HMIRA 11561) Listed.

Nitrate salt #2 (CAS HMIRA 11561) Listed.

US. Massachusetts RTK - Substance List

Nitrate salt #1 (CAS HMIRA 11561)

Nitrate salt #2 (CAS HMIRA 11561)

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

Nitrate salt #1 (CAS HMIRA 11561)

Nitrate salt #2 (CAS HMIRA 11561)

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

Nitrate salt #1 (CAS HMIRA 11561)

Nitrate salt #2 (CAS HMIRA 11561)

US. Rhode Island RTK

Nitrate salt #1 (CAS HMIRA 11561)

Nitrate salt #2 (CAS HMIRA 11561)

US. California Proposition 65

Not Listed.

Inventory status

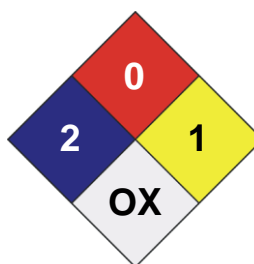
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*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

HEALTH	* 2
FLAMMABILITY	0
PHYSICAL HAZARD	1
PERSONAL PROTECTION	X



Disclaimer

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

Issue date 17-October-2017

Version # 02

Effective date 17-October-2017

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Other information For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.