SAFETY DATA SHEET



Issue Date 24-Apr-2017 Revision Date 24-Apr-2017 Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Name Pro Boron 10%

Other means of identification

SDS# JC-048-007

Details of the supplier of the safety data sheet

Company Name Professional Ag Distribution Inc.

#1-6285-205st

Langley, B.C. Canada V2Y 1N7

604-427-3101

Emergency telephone number

Emergency Telephone 604-768-5602

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1B

Label elements

Emergency Overview

Danger

Hazard statements

Harmful if inhaled Causes skin irritation Causes serious eye damage May cause cancer



Appearance Clear Physical state Liquid Odor Slight

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Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area

Wash face, hands and any exposed skin thoroughly after handling

Precautionary Statements - Response

Specific Treatment (See Section 4 on the SDS)

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/physician

IF ON SKIN: Wash with plenty of soap and water If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting Immediately call a POISON CENTER or doctor/physician

Drink plenty of water

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other Information

Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Boric Acid	10043-35-3	7-13	*
Monoethanolamine	141-43-5	1-5	*

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

General advice Immediate medical attention is required.

Skin Contact Immediate medical attention is required. Wash off immediately with soap and plenty of

water while removing all contaminated clothes and shoes.

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and

continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Call a physician

immediately.

Inhalation Immediate medical attention is required. Remove to fresh air. If not breathing, give artificial

respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

Ingestion Do NOT induce vomiting. Call a physician or poison control center immediately. Never give

anything by mouth to an unconscious person. Drink plenty of water.

Self-protection of the first aiderUse personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms Any additional important symptoms and effects are described in Section 11: Toxicology

Information.

Indication of any immediate medical attention and special treatment needed

Note to physiciansTreat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No Information available.

Explosion data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

spill/leak.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or

tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up Cover liquid spill with sand, earth or other non-combustible absorbent material. Cover

powder spill with plastic sheet or tarp to minimize spreading. Sweep up and shovel into

suitable containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray.

Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of

children.

Incompatible materialsNone known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines Exposure guidelines noted for ingredient(s).

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Boric Acid	STEL: 6 mg/m³ inhalable	-	-
10043-35-3	particulate matter		
	TWA: 2 mg/m ³ inhalable		
	particulate matter		
Monoethanolamine	STEL: 6 ppm	TWA: 3 ppm	IDLH: 30 ppm
141-43-5	TWA: 3 ppm	TWA: 6 mg/m ³	TWA: 3 ppm
		(vacated) TWA: 3 ppm	TWA: 8 mg/m ³
		(vacated) TWA: 8 mg/m ³	STEL: 6 ppm
		(vacated) STEL: 6 ppm	STEL: 15 mg/m ³
		(vacated) STEL: 15 mg/m ³	
Diethanolamine	TWA: 1 mg/m ³ inhalable fraction	(vacated) TWA: 3 ppm	TWA: 3 ppm
111-42-2	and vapor	(vacated) TWA: 15 mg/m ³	TWA: 15 mg/m ³
	S*		_

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d

962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls Showers, Eyewash stations & Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Skin and body protection Wear protective gloves and protective clothing.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

General Hygiene When using do not eat, drink or smoke. Regular cleaning of equipment, work area and

clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands thoroughly

after handling. Keep away from food, drink and animal feeding stuffs.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid
Appearance Clear
Color Amber
Odor Slight

Odor threshold No Information available

Property Values Remarks • Method

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pH 7.5 - 8.5 **Specific Gravity** 1.33

ViscosityNo Information available **Melting point/freezing point**No Information available

Flash point Above 200°F

Boiling point / boiling range $>= 100 \, ^{\circ}\text{C} \, / \, 212 \, ^{\circ}\text{ F} \, (at 760 \, \text{mm Hg})$

Evaporation rateNo Information available **Flammability (solid, gas)**No data available

Flammability Limits in Air

Upper flammability limit:No Information availableLower flammability limit:No Information availableVapor pressureNo Information availableVapor densityNo Information available

Water solubility Complete

Partition coefficientNo Information availableAutoignition temperatureNo Information availableDecomposition temperatureNo Information available

Other Information

Density Lbs/Gal 11.09 VOC Content (%) 5

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product InformationNo data available Harmful by inhalation, ingestion, in contact with eyes and skin.

Inhalation No data available. May cause irritation of respiratory tract. May cause possibly severe

irritation of the respiratory tract.

Eye contact Corrosive to the eyes and may cause severe damage including blindness.

Skin Contact Irritating to skin.

Ingestion No data available. May cause gastro intestinal irritation. Harmful if swallowed. Ingestion

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may cause digestive tract irritation or corrosion, nausea and possibly bloody vomiting, bloody diarrhea and abdominal pain.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Boric Acid 10043-35-3	= 2660 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 0.16 mg/L (Rat)4 h
Monoethanolamine 141-43-5	= 1720 mg/kg (Rat)	= 1000 mg/kg (Rabbit) = 1 mL/kg (Rabbit)	-

Information on toxicological effects

Symptoms No Information available.

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

Sensitization No Information available. Germ cell mutagenicity No Information available.

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

Chemical Name	ACGIH	IARC	NTP	OSHA
Boric Acid	-	Group 2A	-	X
10043-35-3				

IARC (International Agency for Research on Cancer)

Group 2A - Probably Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity No Information available. STOT - single exposure No Information available. STOT - repeated exposure No Information available.

Target organ effects Central nervous system, EYES, Respiratory system, Skin.

Aspiration hazard No Information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document.

ATEmix (oral) 15,033.00 mg/kg ATEmix (dermal) 10,507.00 mg/kg

ATEmix (inhalation-dust/mist) 1.50 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Boric Acid	-	1020: 72 h Carassius auratus mg/L	115 - 153: 48 h Daphnia magna
10043-35-3		LC50 flow-through	mg/L EC50
Monoethanolamine	15: 72 h Desmodesmus subspicatus	227: 96 h Pimephales promelas	65: 48 h Daphnia magna mg/L
141-43-5	mg/L EC50	mg/L LC50 flow-through 3684: 96 h	EC50
		Brachydanio rerio mg/L LC50 static	
		300 - 1000: 96 h Lepomis	
		macrochirus mg/L LC50 static 114 -	
		196: 96 h Oncorhynchus mykiss	
		mg/L LC50 static 200: 96 h	
		Oncorhynchus mykiss mg/L LC50	
		flow-through	
Diethanolamine	2.1 - 2.3: 96 h Pseudokirchneriella	4460 - 4980: 96 h Pimephales	55: 48 h Daphnia magna mg/L
111-42-2	subcapitata mg/L EC50 7.8: 72 h	promelas mg/L LC50 flow-through	EC50
	Desmodesmus subspicatus mg/L	1200 - 1580: 96 h Pimephales	
	EC50	promelas mg/L LC50 static 600 -	
		1000: 96 h Lepomis macrochirus	

	mg/L LC50 static	

Persistence and degradability

No Information available.

Bioaccumulation

No Information available.

Chemical Name	Partition coefficient
Boric Acid	-0.757
10043-35-3	
Monoethanolamine	-1.91
141-43-5	

Other adverse effects No Information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Boric Acid	Toxic
10043-35-3	

14. TRANSPORT INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

DOT Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies DSL/NDSL Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazardNoChronic Health HazardYesFire hazardNoSudden release of pressure hazardNo

Reactive Hazard

No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product contains chemicals known to the state of California to cause cancer, or birth defects or other reproductive harm

Chemical Name	California Proposition 65
Diethanolamine - 111-42-2	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Boric Acid 10043-35-3	X	-	-
Monoethanolamine 141-43-5	X	X	X
Diethanolamine 111-42-2	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

NFPA Health hazards 2 Flammability 0 Instability 0 Physical and Chemical Properties Yes

HMIS Health hazards 2 Flammability 0 Physical hazards 0 Personal protection X

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Revision Note

No Information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet