

# Safety Data Sheet

Issue Date: 19-Aug-2015

Revision Date: 24-Aug-2015

Version 1

## 1. IDENTIFICATION

### Product Identifier

Product Name M-Prove PNW 5-18-3

### Other means of identification

SDS # QA244

### Recommended use of the chemical and restrictions on use

Recommended Use Liquid fertilizer mixture.

### Details of the supplier of the safety data sheet

#### Supplier Address

The McGregor Company  
P.O. Box 740  
Colfax, WA 99111

### Emergency Telephone Number

Company Phone Number 509-397-4355

Emergency Telephone (24 hr) Chemtrec 1-800-424-9300 (North America) 1-703-527-3887 (International)

## 2. HAZARDS IDENTIFICATION

Appearance Clear, dark green liquid

Physical State Liquid

Odor None

### Classification

Reproductive toxicity

Category 1B

### Signal Word

Danger

### Hazard Statements

May damage fertility or the unborn child



### 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

### Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention

### Precautionary Statements - Storage

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other Hazards**

Harmful to aquatic life with long lasting effects

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Please also refer to subsequent sections of this SDS for additional information regarding the components of this product.

Chemical Name	CAS No	Weight-%
Iron HEDTA	17084-02-5	Proprietary
Manganese EDTA	15375-84-5	Proprietary
Phosphoric Acid	7664-38-2	Proprietary
Potassium hydroxide	1310-58-3	Proprietary
Potassium Nitrate	7757-79-1	Proprietary
Boric Acid	10043-35-3	Proprietary

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

### 4. FIRST-AID MEASURES

**First Aid Measures**

<b>General Advice</b>	Provide this SDS to medical personnel for treatment.
<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.
<b>Skin Contact</b>	Wash off immediately with plenty of water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.
<b>Inhalation</b>	Remove exposed individual(s) to fresh air for 20 minutes. Consult a physician / poison center if individual's condition declines or if symptoms persist.
<b>Ingestion</b>	Do not induce vomiting. Rinse mouth. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

**Most important symptoms and effects**

<b>Symptoms</b>	May cause eye, skin and respiratory tract irritation.
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**Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</b>	Treat symptomatically.
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### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

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

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

Product is not flammable.

**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**

- Personal Precautions**            Ventilate affected area. Wear protective clothing as described in Section 8 of this safety data sheet. Wash face, hands, and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product.
- Environmental Precautions**    See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

- Methods for Containment**        Prevent further leakage or spillage if safe to do so. Soak up and contain spill with an inert (i.e. vermiculite, dry sand or earth) absorbent material.
- Methods for Clean-Up**            Sweep up absorbed material and shovel into suitable containers for disposal. Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

- Advice on Safe Handling**        Handle in accordance with good industrial hygiene and safety practice. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash thoroughly after handling. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Do not eat or drink while handling this material.

**Conditions for safe storage, including any incompatibilities**

- Storage Conditions**            Keep containers tightly closed in a dry, cool and well-ventilated place.
- Incompatible Materials**        Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Iron HEDTA 17084-02-5	TWA: 1 mg/m <sup>3</sup> Fe	(vacated) TWA: 1 mg/m <sup>3</sup> Fe	TWA: 1 mg/m <sup>3</sup> Fe
Manganese EDTA 15375-84-5	-	(vacated) Ceiling: 5 mg/m <sup>3</sup> Ceiling: 5 mg/m <sup>3</sup> Mn	IDLH: 500 mg/m <sup>3</sup> Mn TWA: 1 mg/m <sup>3</sup> Mn STEL: 3 mg/m <sup>3</sup> Mn
Phosphoric Acid 7664-38-2	STEL: 3 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> (vacated) TWA: 1 mg/m <sup>3</sup> (vacated) STEL: 3 mg/m <sup>3</sup>	IDLH: 1000 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>
Potassium hydroxide 1310-58-3	Ceiling: 2 mg/m <sup>3</sup>	(vacated) Ceiling: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>
Boric Acid 10043-35-3	STEL: 6 mg/m <sup>3</sup> inhalable fraction TWA: 2 mg/m <sup>3</sup> inhalable fraction	-	-

**Appropriate engineering controls**

**Engineering Controls** Maintain eye wash fountain and quick-drench facilities in work area.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Use safety goggles, safety glasses with side shields and/or a full face shield as described by OSHA's eye and face protection regulations in 29CFR 1910.133.

**Skin and Body Protection** Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Respiratory Protection** Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator.

**General Hygiene Considerations** Avoid contact with skin, eyes and clothing. After handling this product, wash hands before eating, drinking, or smoking. If contact occurs, remove contaminated clothing. If needed, take first aid action shown on section 4 of this SDS. Launder contaminated clothing before reuse.

<b>9. PHYSICAL AND CHEMICAL PROPERTIES</b>
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**Information on basic physical and chemical properties**

<b>Physical State</b>	Liquid	<b>Odor</b>	None
<b>Appearance</b>	Clear, dark green liquid	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Clear, dark green		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	6.48	
<b>Melting Point/Freezing Point</b>	Not determined	
<b>Boiling Point/Boiling Range</b>	Not determined	
<b>Flash Point</b>	Not determined	
<b>Evaporation Rate</b>	Not determined	
<b>Flammability (Solid, Gas)</b>	n/a-liquid	
<b>Upper Flammability Limits</b>	Not determined	
<b>Lower Flammability Limit</b>	Not determined	
<b>Vapor Pressure</b>	Not determined	
<b>Vapor Density</b>	<1.0	
<b>Specific Gravity</b>	Not determined	
<b>Water Solubility</b>	Soluble in water	
<b>Solubility in other solvents</b>	Not determined	
<b>Partition Coefficient</b>	Not determined	
<b>Auto-ignition Temperature</b>	Not determined	
<b>Decomposition Temperature</b>	Not determined	
<b>Kinematic Viscosity</b>	Not determined	
<b>Dynamic Viscosity</b>	Not determined	
<b>Explosive Properties</b>	Not determined	
<b>Oxidizing Properties</b>	Not determined	
<b>Bulk Density</b>	10.55 lbs/gal	

<b>10. STABILITY AND REACTIVITY</b>
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**Reactivity**

Not reactive under normal conditions.

**Chemical Stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to Avoid**

Keep away from heat, sparks and open flame.

**Incompatible Materials**

Strong oxidizing agents.

**Hazardous Decomposition Products**

None known based on information supplied.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Product Information**

<b>Eye Contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Skin Contact</b>	Prolonged contact may cause redness and irritation.
<b>Inhalation</b>	Avoid breathing vapors or mists.
<b>Ingestion</b>	Ingestion may cause irritation to mucous membranes.

**Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ammonium Polyphosphate 68333-79-9	= 4740 mg/kg ( Rat )	-	-
Phosphoric Acid 7664-38-2	= 1530 mg/kg ( Rat )	= 2740 mg/kg ( Rabbit )	> 850 mg/m <sup>3</sup> ( Rat ) 1 h
Potassium hydroxide 1310-58-3	= 284 mg/kg ( Rat )	-	-
Potassium Nitrate 7757-79-1	= 3015 mg/kg ( Rat )	-	-
Boric Acid 10043-35-3	= 2660 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 0.16 mg/L ( Rat ) 4 h

**Information on physical, chemical and toxicological effects**

**Symptoms** Please see section 4 of this SDS for symptoms.

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

**Carcinogenicity** Nitrate or nitrite ingested under conditions that result in endogenous nitrosation are considered IARC group 2A carcinogens.

Chemical Name	ACGIH	IARC	NTP	OSHA
Potassium Nitrate 7757-79-1		Group 2A		X

**Legend***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** May damage fertility or the unborn child.

**Numerical measures of toxicity**

Not determined

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Harmful to aquatic life with long lasting effects.

**Component Information**

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ammonium Polyphosphate 68333-79-9		500: 96 h Brachydanio rerio mg/L LC50 static 123: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 685 - 1066: 96 h Oncorhynchus mykiss mg/L LC50 static 389 - 654: 96 h Pimephales promelas mg/L LC50 static		
Phosphoric Acid 7664-38-2		3 - 3.5: 96 h Gambusia affinis mg/L LC50		4.6: 12 h Daphnia magna mg/L EC50
Potassium hydroxide 1310-58-3		80: 96 h Gambusia affinis mg/L LC50 static		
Boric Acid 10043-35-3		1020: 72 h Carassius auratus mg/L LC50 flow-through		115 - 153: 48 h Daphnia magna mg/L EC50

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

Not determined.

**Mobility**

Chemical Name	Partition Coefficient
Potassium hydroxide 1310-58-3	0.65 0.83
Boric Acid 10043-35-3	-0.757

**Other Adverse Effects**

Not determined

**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**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**California Hazardous Waste Status**

Chemical Name	California Hazardous Waste Status
Phosphoric Acid 7664-38-2	Corrosive
Potassium hydroxide 1310-58-3	Toxic Corrosive
Potassium Nitrate 7757-79-1	Ignitable Reactive
Boric Acid 10043-35-3	Toxic

**14. TRANSPORT INFORMATION**

**Note** Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT** Not regulated

**IATA** Not regulated

**IMDG**  
**Marine Pollutant** This material may meet the definition of a marine pollutant

**15. REGULATORY INFORMATION****International Inventories**

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Iron HEDTA	Present	X		Present			X			X
Manganese EDTA	Present	X		Present		Present	X			X
Phosphoric Acid	Present	X		Present		Present	X	Present	X	X
Potassium hydroxide	Present	X		Present		Present	X	Present	X	X
Potassium Nitrate	Present	X		Present		Present	X	Present	X	X
Boric Acid	Present	X		Present		Present	X	Present	X	X

**Legend:**

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

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

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations****CERCLA**

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Phosphoric Acid 7664-38-2	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
Potassium hydroxide 1310-58-3	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

**SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Manganese EDTA - 15375-84-5	15375-84-5	Proprietary	1.0
Potassium Nitrate - 7757-79-1	7757-79-1	Proprietary	1.0

**CWA (Clean Water Act)**

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Phosphoric Acid	5000 lb			X
Potassium hydroxide	1000 lb			X

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Manganese EDTA 15375-84-5	X		X
Phosphoric Acid 7664-38-2	X	X	X
Potassium hydroxide 1310-58-3	X	X	X
Potassium Nitrate 7757-79-1	X	X	X



**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Instability</b>	<b>Special Hazards</b>
	1	0	0	Not determined
<b><u>HMIS</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Physical Hazards</b>	<b>Personal Protection</b>
	1	0	0	Not determined

**Issue Date:** 19-Aug-2015  
**Revision Date:** 24-Aug-2015  
**Revision Note:** New product

**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**