



**ACTIVE**  
AgriScience

tel.: 1-639-398-0485  
3422 Millar Ave,  
Saskatoon, SK,  
S7K 5Y7, Canada  
[activeagriscience.com](http://activeagriscience.com)

## MATERIAL SAFETY DATA SHEET

### SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>PRODUCT IDENTIFIER</b>		<b>Active STABILIZER™ PLUS</b>					
<b>PRODUCT USE</b>		Liquid nitrogen stabilizer for urea fertilizers		<b>USE RESTRICTIONS</b>		For professional use only. Use only as labeled	
<b>MANUFACTURERS NAME</b>		Active AgriScience Inc.		<b>DISTRIBUTORS NAME</b>			
<b>STREET ADDRESS</b>		3422 Millar Avenue		<b>STREET ADDRESS</b>			
<b>CITY</b>	Saskatoon	<b>PROVINCE</b>	Saskatchewan, Canada	<b>CITY</b>		<b>COUNTRY</b>	
<b>POSTAL CODE</b>	S7K 5Y7	<b>EMERGENCY TELEPHONE</b>	1-639-398-0485	<b>POSTAL CODE</b>		<b>EMERGENCY TELEPHONE</b>	
<b>DATE</b>	Sept. 4 <sup>th</sup> 2020	<b>PREPARED BY</b>	Active AgriScience Inc.	<b>PHONE NUMBER</b>			

### SECTION 2 – HAZARDS IDENTIFICATION

#### GHS CLASSIFICATION

HPR (WHMIS 2015)	Eye Damage / Irritation: Category 1 Skin Corrosion / Irritation: Category 2 Specific Target Organ Toxicity (STOT); Single exposure: Category 3 (respiratory irritation) Specific Target Organ Toxicity (STOT); Single exposure: Category 2 (kidneys) Reproductive toxicity: Category 1B
OSHA Hazard Communication Standard (29 CFR 1910.1200)	Eye Damage / Irritation: Category 1 Skin Irritation: Category 2 Specific Target Organ Toxicity (STOT); Single exposure: Category 3 (respiratory irritation) Specific Target Organ Toxicity (STOT); Single exposure: Category 2 (kidneys) Reproductive toxicity: Category 1B



**DANGER**

**HAZARD STATEMENTS:** Causes skin irritation. Causes serious eye damage. May cause respiratory irritation. May damage fertility or the unborn child. Ingestion may cause digestive tract irritation.

**PRECAUTIONARY STATEMENTS:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing mist/vapors/spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area.

**FIRST AID: IF ON SKIN:** Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. **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/doctor. **IF INHALED:** Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If exposed or concerned: Get medical advice/attention

**STORAGE:** Store locked up. Store in a well-ventilated place. Keep container tightly closed

**DISPOSAL:** dispose of this product and its container in accordance with Federal, state, provincial, and local regulations



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### *Active STABILIZER PLUS*

#### SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS	CAS#	CONCENTRATION
N-(n-Butyl)-thiophosphoric triamide	94317-64-3	8-16%
Propylene glycol	57-55-6	20-40%
N-methyl-2-pyrrolidone	872-50-4	15-30%
Ethylene glycol	107-21-1	12-20%
3,4-Dimethylpyrazole Phosphate (DMPP)	202842-98-6	1-4%

#### SECTION 4 – FIRST AID MEASURES

<b>EYE CONTACT</b>	Immediately flush eyes with a large gentle stream of water for 15 minutes while holding the upper and lower eyelids open. Seek immediate medical attention
<b>SKIN CONTACT</b>	Immediately flush skin with plenty of water. Remove contaminated clothing and wash before reuse. Seek medical attention if irritation persists.
<b>INHALATION</b>	Move victim to fresh air. Allow the victim to rest in a well-ventilated area. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Seek medical attention if irritation persists.
<b>INGESTION</b>	Rinse mouth. Never give anything by mouth to an unconscious person. DO NOT induce vomiting without physician's direction. If vomiting occurs naturally, have victim lean forward with head down to avoid breathing in vomit, rinse mouth. Seek medical attention if you feel unwell.
Most Important Symptoms, both acute & delayed	Risk of serious damage to the eyes. Causes skin and respiratory irritation. Ingestion may cause severe irritation of the mouth, the esophagus, and the gastrointestinal tract.
Indication of immediate medical attention and special treatment needed	Treat symptomatically. Effects may be delayed.

#### SECTION 5 – FIRE FIGHTING MEASURES

<b>FLAMMABLE</b>	Product will not burn or support combustion
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<b>MEANS OF EXTINCTION</b>	Use extinguishing methods appropriate for the surrounding fire. Do not use a water jet as this may spread the fire.
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### **Active STABILIZER PLUS**

<b>FLASHPOINT &amp; METHOD</b>	Not applicable	<b>UPPER FLAMMABLE LIMIT</b>	Not applicable	<b>LOWER FLAMMABILITY LIMIT</b>	Not applicable
<b>AUTO IGNITION TEMPERATURE</b>	Not applicable	<b>SENSITIVITY TO IMPACT</b>	Not available	<b>SENSITIVITY TO STATIC DISCHARGE</b>	Not available
<b>HAZARDOUS COMBUSTION PRODUCTS</b>	Toxic, irritating and/ or corrosive gases may be released during a fire				

### **SECTION 6 – ACCIDENTAL RELEASE MEASURES**

<b>LEAK &amp; SPILL PROCEDURES</b>	Wear personal protective equipment outlined in SECTION 8. Ventilate area of spill. Keep out of low areas. Remove sources of ignition.  <b>Large Spills:</b> Dike spilled material to contain spill if necessary. Adsorb with inert material (clay cat litter, dry sand, and earth. Place recovered material into clean, dry containers for disposal. Flush area with water, following recovery. Do not flush rinse water to drain or the environment
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### **SECTION 7 – HANDLING AND STORAGE**

<b>HANDLING</b>	Do not handle until all safety precautions have been read and understood. Do not get in eyes, or skin. Do not breathe mist/spray. Wear protective gloves, and eye protection – See SECTION 8 Wash hands before eating, drinking, smoking and when leaving work
<b>STORAGE</b>	Store in a cool, dry, well ventilated area away from food or feed storage
<b>INCOMPATIBLE MATERIALS</b>	Not available

### **SECTION 8 – EXPOSURE CONTROL / PERSONAL PROTECTION**

<b>EXPOSURE LIMITS</b>	US Workplace Environmental Exposure Level Guides: N-methyl-2-pyrrolidone: TWA 40 mg/m <sup>3</sup> . Propylene Glycol: TWA 10 mg/m <sup>3</sup> (aerosol). Ethylene Glycol: TWA 10 mg/m <sup>3</sup>
<b>ENGINEERING CONTROLS</b>	Ensure adequate ventilation when handling or applying this product. Follow all label instructions. Follow manufacturers' instructions for cleaning / maintaining personal protective equipment. If mists are present and ventilation is absent or poor, use an air purifying respirator. Provide eye wash station in area where product is handled.

### **PERSONAL PROTECTIVE EQUIPMENT**



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<b>Skin</b>	Wear neoprene gloves. As product can be absorbed through skin, <b>CHANGE GLOVES FREQUENTLY.</b> Chemical resistant coveralls when handling or applying this product are recommended
<b>Eyes</b>	Wear chemical goggles when handling or applying product

### **Active STABILIZER PLUS**

<b>Respirator</b>	Wear air supplied respirator where airborne concentrations exceed recommended exposure limits or are unknown.
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### SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b>PHYSICAL STATE</b>	Liquid	<b>APPEARANCE</b>	Not available	<b>COLOUR</b>	Blue
<b>VISCOSITY</b>	Not available	<b>BOILING POINT</b>	Not available	<b>FREEZING POINT</b>	Not available
<b>EVAPORATION RATE</b>	Not available	<b>SPECIFIC GRAVITY</b>	1.05-1.1 g/cm <sup>3</sup>	<b>ODOUR</b>	Not available
<b>PH</b>	6.2 – 7.0	<b>SOLUBILITY IN WATER</b>	Miscible in water	<b>ODOUR THRESHHOLD</b>	Not available

### SECTION 10 – STABILITY AND REACTIVITY

<b>CHEMICAL STABILITY</b>	Stable under normal conditions of use and storage
<b>INCOMPATABILITY WITH OTHER SUBSTANCES</b>	Acids, strong reducing agents, strong oxidizing agents
<b>HAZARDOUS DECOMPOSITION PRODUCTS</b>	Toxic and/or irritating gases may be released during a fire: carbon oxides, nitrogen oxides, Sulphur oxides

### SECTION 11 – TOXICOLOGICAL INFORMATION

<b>ACUTE TOXICITY</b>	Mixture is not acutely toxic
<b>CHRONIC TOXICITY</b>	Not available
<b>EYE / SKIN IRRITATION</b>	Causes serious eye damage and skin irritation. May be absorbed through skin
<b>SENSITIZATION</b>	Not available
<b>CARCINOGENICITY</b>	No component of this product present at levels $\geq 0.1\%$ is identified as a probable, possible, or confirmed human carcinogen by IARC, or ACGIH
<b>REPRODUCTIVE TOXICITY</b>	May damage fertility or unborn child



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<b>MUTAGENICITY</b>	Not available
<b>Possible delayed effects</b>	N-methyl-2-pyrrolidone: effects may be delayed. Animal studies show adverse effects to liver and kidneys.

### **Active STABILIZER PLUS**

### **SECTION 12 – ECOLOGICAL INFORMATION**

#### **ECOTOXICITY - AQUATIC TOXICITY**

##### ***N-(n-butyl)-thiophosphoric triamide***

<b>Acute Toxicity</b>	<b>Test</b>	<b>Species</b>	<b>Test results</b>
Algae	EC <sub>50</sub>	Selenastrum capricornutum	280 mg/l, 96 hours
Crustacea	EC <sub>50</sub>	Daphnia magna	290 mg/l, 48 hours
	LC <sub>50</sub>	Daphnia	350 mg/l, 48 hours
Fish	LC <sub>50</sub>	Lepomis macrochirus	1140 mg/l, 96 hours

##### ***N-methyl-2-pyrrolidone (CAS 872-50-4)***

<b>Acute Toxicity</b>			
Crustacea	LC <sub>50</sub>	Palaemonetes vulgaris	1107 mg/l, 96 hours
Algae	EC <sub>50</sub>	Scenedesmus subspicatus	> 500 mg/l, 72 hours
Crustacea	EC <sub>50</sub>	Daphnia magna	> 1000 mg/l, 24 hours
Fish	LC <sub>50</sub>	Oncorhynchus mykiss	> 500 mg/l, 96 hours
<b>Chronic Toxicity</b>			
Crustacea	LC <sub>50</sub>	Daphnia magna	25 mg/l, 21 days

##### ***Propylene Glycol (CAS 57-55-6)***

<b>Acute Toxicity</b>			
Crustacea	LC <sub>50</sub>	Ceriodaphnia	18340 mg/l, 48 hours

##### ***Ethylene Glycol (CAS 107-21-1)***

<b>Acute Toxicity</b>			
	LC <sub>50</sub>	fish	>72.860 mg/l, 96 hours
Crustacea	EC <sub>50</sub>	daphnia magna	>100 mg/l, 48 hours
Algae	ErC <sub>50</sub>	algae	<13.000 mg/l, 96 hours
<b>Chronic Toxicity</b>			
	LC <sub>50</sub>	>1.500 mg/l	>1.500 mg/l, 28 days
	EC <sub>50</sub>	aquatic invertebrates	>15.000 mg/l, 21 days
	NOEC	aquatic invertebrates	≥1.000 mg/l, 23 days

<b>Persistence and degradability</b>	This product is not readily biodegradable
<b>Bioaccumulation potential</b>	Not available



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<b>Partition coefficient n-octanol / water (log Kow)</b>	
N-methyl-2-pyrrolidone (CAS 872-50-4)	-0.54
Propylene Glycol (CAS 57-55-6)	-0.92

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Ethylene Glycol (CAS 107-21-1)	-1.36
Mobility in Soil	Product is water soluble and may move through soil

### **SECTION 13 – DISPOSAL CONSIDERATIONS**

<b>WASTE DISPOSAL</b>	Dispose of this product and its container in accordance with applicable laws and regulations. Do not allow this product to enter drains or drinking water sources
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### **SECTION 14 – TRANSPORT INFORMATION**

<b>SHIPPING</b>	TDG not regulated as dangerous goods DOT: not regulated as dangerous goods IATA: not regulated as dangerous goods IMDG: not regulated as dangerous goods
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### **SECTION 15 – REGULATORY INFORMATION**

This SDS is prepared to comply with the Global Harmonized System of Chemical Classification and Labeling (GHS) and conforms to the requirements of HPR (WHMIS 2015) & OSHA Hazard Communication Standard (29 CFR 1910.1200).

### **SECTION 16 – OTHER INFORMATION**

To the best of our knowledge, the information contained herein is current and correct as of the date of this SDS, however, the information and recommendations are presented without warranty, representation or license of any kind, with respect to their accuracy, or completeness, and the seller, supplier and manufacturer (Supplier) of this material or their affiliates, disclaim all liability for reliance on such information and recommendations.

Final determination of the suitability of any material is the sole responsibility of the buyer or the user (recipient). All materials may present unknown hazards and should be used with caution. The recipient assumes all risk in connection with the use of this material and assumes all responsibility for ensuring the material is used in a safe manner in compliance with applicable environmental, and health and safety laws.

The supplier does not warrant the merchantability of this material or the fitness of the material for any particular use and assumes no responsibility for injury or damage caused directly or indirectly by the use of this material.