

tel.: 604.864.0154 fax: 604.864.0156 t.free: 1.855.400.0154 #209 - 31136 Peardonville Rd, Abbotsford, BC, V2T 6K2, Canada activeagriscience.com

MATERIAL SAFETY DATA SHEET

PRODUCT IDENTIFIER		ARM U™						
PRODUCT USE		Liquid nitrogen stabilizer for urea fertilizers		USE RESTRICTIONS		For professional use only. Use only as labeled		
MANFACTURERS NAME		Active AgriSc	cience Inc. DISTRIBUTORS		TORS NAME			
STREET ADDRESS		209-31136 Peardonville Rd		STREET ADDRESS				
CITY	Abbotsford	PROVINCE	British Columbia, Canada	CITY		COUNTRY		
POSTAL CODE	V2T 6K2	EMERGENCY TELEPHONE	1-604-864-0156	POSTAL CODE		EMERGENCY TELEPHONE		
DATE	December 16, 2016	PREPARED BY	Active AgriScience Inc.	PHONE NUMBER				

SECTION 2 – HAZARDS IDENTIFICATION

GHS CLASSIFICATION				
Eye Damage / Irritation: Category 1 Skin Corrosion / Irritation: Category 2 HPR (WHMIS 2015) 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			



HAZARD STATEMENTS: Causes skin irritation. Causes serious eye damage. May cause respiratory irritation. May damage fertility or the unborn child.

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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SECTION 3 – Co	OMPOSITION /	INFORMAT	TON ON INGREDIE	NTS			
HAZARDOUS INGREDIENTS			CAS#	CONC	ENTRATION		
N-(n-Butyl)-thiophosphoric triamide			94317-64-3	1	5-25%		
propane-1,2-diol			57-55-6	3	0-50%		
N-methyl-2	-pyrrolidone		872-50-4	3	30-70%		
1,2-Eth	nanediol		107-21-1	3	0-50%		
SECTION 4 – FI	RST AID MEAS	SURES					
EYE CONTACT		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					
SKIN CONTACT		Immediately flush skin with plenty of water. Remove contaminated clothing and wash before reuse. Seek medical attention if irritation persists.					
INHALATION	difficult, g	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.					
INGESTION	vomiting v	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				
Indication of immediate medical attention and special treatment needed			Treat symptomatically. Effects may be delayed.				
SECTION 5 – FI	RE FIGHTING I	MEASURES	3				
FLAMMABLE Product will r		ill not burn or	not burn or support combustion				
MEANS OF EXTINCTION	MEANS OF EXTINCTION Use extinguishin this may spread		ethods appropriate for the surrounding fire. Do not use a water jet as fire.				



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FLASHPOINT & METHOD	Not applicable	UPPER FLAMMABLE LIMIT	Not applicable	LOWER FLAMMABILITY LIMIT	Not applicable		
AUTO IGNITION TEMPERATURE	Not applicable	SENSITIVITY TO IMPACT	Not available	SENSITIVITY TO STATIC DISCHARGE	Not available		
HAZARDOUS COMBU	JSTION PRODUCTS	Toxic, irritating and/ or corrosive gases may be released during a fire					
SECTION 6 - A	CCIDENTAL RE	LEASE MEA	ASURES				
Wear personal protective equipment outlined in SECTION 8. Ventilate area of spill. Keep out of areas. Remove sources of ignition. Large Spills: Dike spilled material to contain spill if necessary. Adsorb with inert material (clay of litter, dry sand, and earth. Place recovered material into clean, dry containers for disposal. Flus with water, following recovery. Do not flush rinse water to drain or the environment					aterial (clay cat lisposal. Flush area		
SECTION 7 - H	ANDLING AND	STORAGE					
HANDLING skin. Do not breat		til all safety precautions have been read and understood. Do not get in eyes, or the mist/spray. Wear protective gloves, and eye protection – See SECTION 8 re eating, drinking, smoking and when leaving work					
STORAGE	Store in a cool, dry, well ventilated area away from food or feed storage						
INCOMPATIBLE MATERIALS	Not available						
SECTION 8 - E	XPOSURE CON	ITROL / PER	SONAL PROTECT	TON			
EXPOSURE LIMITS	EXPOSURE LIMITS Canada OEL: N-methyl-2-pyrrolidone: TWA 400 mg/m³ OSHA: Not available						
ENGINEERING CONTROLS					equipment. If mists		
PERSONAL PROTECTIVE EQUIPMENT							
Skin	Wear neoprene gloves. CHANGE GLOVES FREQUENTLY. Chemical resistant coveralls when handling or applying this product are recommended						
Eyes	Wear chemical goggles when handling or applying product						



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Respirator	Use an approved air purifying respirator if mists are present and ventilation is absent or poor							
SECTION 9 - PH	HYSICAL	AND	CHEMIC	AL PROPE	RTIES			
PHYSICAL STATE	Liqu	uid	APPEARA	NCE	Not available	COLOUR	Orange	
VISCOSITY	Not ava	ailable BOILING F		POINT	Not available	FREEZING POINT	Not available	
EVAPORATION RATE	Not ava	vailable SPECIFIC		GRAVITY	1.08-1.1 g/cm ³	ODOUR	Not available	
РН	6.5 -	- 7.0	SOLUBILITY IN WATER		Miscible in water	ODOUR THRESHHOLD	Not available	
SECTION 10 - S	TABILI	ΓΥ ΑΝΙ	REACT	IVITY				
CHEMICAL STABILITY				Stable under normal conditions of use and storage				
INCOMPATABILITY WITH OTHER SUBSTANCES				Acids, strong reducing agents, strong oxidizing agents				
HAZARDOUS DECOMPOSITION PRODUCTS				Toxic and/or irritating gases may be released during a fire: carbon oxides, nitrogen oxides, Sulphur oxides				
SECTION 11 – T	OXICOL	_OGIC	AL INFOR	RMATION				
ACUTE TOXICITY Mixture is not acu			tely toxic					
CHRONIC TOXICITY Not a			Not available					
EYE / SKIN IRRITATION Causes			Causes serious eye damage and skin irritation. May be absorbed through skin					
SENSITIZATION Not available			ailable					
CARCINIOGENICITY			f this product present at levels ≥ 0.1% is identified as a probable, rmed human carcinogen by IARC, or ACGIH					
REPRODUCTIVE TOXICITY May damage for			amage ferti	rtility or unborn child				
MUTAGENICITY Not available			ailable					
Possible delayed effects N-methyl-2-pyrrol liver and kidneys.			idone: effect	s may be delayed. A	nimal studies show ad	verse effects to		
SECTION 12 -	ECOLO	GICA	L INFOR	MATION				



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ECOTOXICITY	Not available					
SECTION 13 – DISPOSAL CONSIDERATIONS						
WASTE DISPOSAL	Dispose of this product and its container in accordance with Federal, State, Provincial and local regulations					
SECTION 14 -	TRANSPORT INFORMATION					
SHIPPING	TDG not a dangerous good for transport DOT: not a dangerous good for transport					

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.