



Agrico Canada Limited
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Mississauga, ON L4T 1G3

Mono Ammonium Phosphate (MAP)

MATERIAL SAFETY DATA SHEET (MSDS)

MSDS NUMBER ► ACL-003 (REV. JAN 2009)

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SECTION I		NAME	
PRODUCT ►	Monoammonium Phosphate (M.A.P.)		
CHEMICAL/ SYNONYMS ►	Ammonium Phosphate Monobasic		
CHEMICAL FAMILY ►	Ammonium Phosphates		
FORMULA ►	(NH ₄)H ₂ PO ₄	C.A.S. NUMBER ►	7722-76-1

**AGRICO (MISSISSAUGA)
EMERGENCY ASSISTANCE
(905) 672-5700**

**CANUTEC
24 HOUR EMERGENCY
(613) 996-6666**

SECTION II		INGREDIENTS	
The composition of monoammonium phosphate varies according to raw materials. Typical analysis shows:			
COMPOSITION		%	
(NH ₄)H ₂ PO ₄		approx.	85%
F			1.4 – 1.7%
Water			1.0 – 1.8%
Iron			1.2 – 1.7%
Aluminum			0.6 – 1.0%
Sulfur			1.5 – 2.0%
Calcium			0.2 – 0.6%
Magnesium			0.4 – 0.7%

SECTION III		PHYSICAL DATA	
BOILING POINT (0°C) ►	Decomposes at 150°C	MELTING POINT (0°C) ►	190°
VAPOR PRESSURE (mmHg) ►	N/A	SPECIFIC GRAVITY (H₂O = 1) ►	1.893
% VOLATILE BY VOLUME ►	N/A	VAPOR DENSITY (AIR = 1) ►	N/A
SOLUBILITY IN WATER ►	Soluble	EVAPORATION RATE (BUTYL ACETATE = 1) ►	N/A
MOLECULAR WEIGHT ►	115.03	PHYSICAL STATE ►	Solid
DENSITY lbs/U.S. gal ►	61 lbs. per cu. ft. (bulk)	pH ►	4.2

APPEARANCE AND ODOR

Gray, granular, slight ammonia odor.

SECTION IV		REACTIVITY	
STABILITY ►	<input type="checkbox"/> UNSTABLE <input checked="" type="checkbox"/> STABLE	HAZARDOUS POLYMERIZATION ►	<input type="checkbox"/> MAY OCCUR <input checked="" type="checkbox"/> WILL NOT OCCUR

CONDITIONS AND MATERIALS TO AVOID

None

HAZARDOUS DECOMPOSITION PRODUCTS

None

SECTION V FIRE AND EXPLOSION HAZARDS			
FLASH POINT AND METHOD USED N/A	FLAMMABLE LIMITS — % VOLUME IN AIR	LOWER N/A	UPPER N/A
EXTINGUISHING MEDIA Use media needed to control surrounding fire.			
SPECIAL FIRE FIGHTING PROCEDURES AND PRECAUTIONS Wear self-contained breathing apparatus (positive pressure, if available) and full protective clothing.			
AUTOIGNITION TEMPERATURE: _____ N/A _____ °C _____ N/A _____ °F			
UNUSUAL FIRE AND EXPLOSION HAZARDS None; considered stable.			

SECTION VI HEALTH INFORMATION			
PERMISSIBLE EXPOSURE LIMIT (PEL) _____ None _____	ACGIH THRESHOLD LIMIT VALUE (TLV) _____ None _____		
LISTED IN : IARC MONOGRAPHS _____ No _____	NTP LIST _____ No _____	Dust: PEL 15 mg/m ³ – Total; 5 mg/m ³ – resp. TLV 10 mg/m ³ – Total; 5 mg/m ³ – resp.	
HEALTH HAZARD CLASSIFICATION None	PRIMARY ROUTE(S) OF ENTRY Inhalation		
SYMPTOMS OF OVEREXPOSURE Acute: At high dust concentrations, irritation of eyes, skin, and mucous membranes by chemical or mechanical action may occur. Chronic: None			
AGGRAVATED MEDICAL CONDITION Preexisting respiratory disease including asthma and emphysema.			
TOXIC DATA None established.			

SECTION VII STORAGE AND SPECIAL PRECAUTIONS	
HANDLING AND STORAGE PRECAUTIONS None	
OTHER PRECAUTIONS None	

SECTION VIII EMERGENCY AND FIRST AID PROCEDURES	
EYE CONTACT	If eye irritation occurs, flush with copious amounts of water. Get medical attention if irritation persists.
SKIN CONTACT	If irritation occurs, wash skin with water and mild detergent. Get medical attention if irritation persists.
INHALATION	If breathing difficulty occurs because of dust inhalation, remove to fresh air. If discomfort continues, seek medical attention.
INGESTION	If the person is conscious, drink large quantities of water. Do not induce vomiting. Get medical attention.
NOTE TO THE PHYSICIAN	Symptomatic treatment only.

SECTION IX PERSONAL PROTECTION INFORMATION	
RESPIRATORY PROTECTION	A NIOSH approved dust respirator (either single use or multiple use) should be worn when applicable (total and/or respirable) dust standards are exceeded.
ENGINEERING CONTROLS	Adequate ventilation should be available to maintain dust levels below applicable standards on respirable and total nuisance dust.
SKIN PROTECTION	No protection normally required. If irritation occurs, long sleeves and impervious gloves should be worn.
EYE PROTECTION	When appropriate, suitable eye protection should be used.
OTHER PROTECTIVE EQUIPMENT	Washing facilities should be available.

SECTION X TRANSPORTATION REQUIREMENTS	
DEPARTMENT OF TRANSPORTATION	
Not regulated (Under the TDG Act).	
PROPER SHIPPING NAME	IDENTIFICATION NUMBER (PIN)
N/A	N/A
	PACKING GROUP
	N/A
OTHER REQUIREMENTS	
N/A	

SECTION XI EMERGENCY ACTION – (SPILL OR LEAK)	
EMERGENCY ACTION	
Prevent large quantities from contact with waterways or vegetation.	
SMALL SPILLS	
If uncontaminated, recover and reuse as product. Consult with environmental regulatory agencies for acceptable disposal procedures.	
LARGE SPILLS	
Consult with environmental regulatory agencies for acceptable disposal procedures if product cannot be recovered and reused.	
FOOTNOTES	
Note: N/A means Not Applicable.	

DISCLAIMER

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