



MATERIAL SAFETY DATA SHEET

SECTION 1 – PRODUCT IDENTIFICATION AND USE

PRODUCT IDENTIFIER:	POTASSIUM NITRATE
PRODUCT USE:	Fertilizer
SUPPLIER'S NAME:	Agrisol Manufacturing Inc
ADDRESS	220 – 7565, 132 Street Surrey, BC, V3Z 1K7, Canada
IN CASE OF EMERGENCY:	1(604)805-2417

SECTION 2 – HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	CAS #	LD ₅₀ OF INGREDIENT (SPECIFY SPECIES & ROUTE)
Potassium Nitrate	7757-79-1	LD ₅₀ (oral rat) 3750mg/Kg

SECTION 3 – PHYSICAL DATA

PHYSICAL STATE:	Solid (crystalline./Powder)	ODOUR & APPEARANCE	Odorless, White
ODOUR THRESHOLD (ppm):	NAV	VAPOUR PRESSURE (<1 mm Hg): @ 20°C	< 0.1 kPa
BULK DENSITY:	1100 kg/m ³ (68.6/ Ib/cf ³)	RELATIVE DENSITY (g/cc)	NAV
pH:	6-10.5 (Conc. (%w/w)10)[Basic]	EVAPORATION RATE: (Butyl Acetate =1.0)	NAV
MELTING/FREEZING POINT/ (°C)	333.85 °C (632.9 °F)	SOLUBILITY (in water):	31.6 g/L of water @ 20°C
COEFF. WATER/OIL DIST	NAV	SPECIFIC GRAVITY	2.109

SECTION 4 – FIRE AND EXPLOSION DATA

FLAMMABLE:	Non-flammable		
IF YES, UNDER WHAT CONDITIONS?	Not combustible. Thermal decomposition products are dependent on temperature conditions. These products are water, oxides of potassium and oxides of nitrogen.		
MEANS OF EXTINCTION:	Use an extinguishing agent suitable for the surrounding fire. This metrical increases the risk of fire and may aid combustion. Contact with combustible material may cause fire.		
SPECIAL PROCEDURES:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with full face-piece operated in positive pressure mode.		
FLASHPOINT (°C) & METHOD:	None & NAP	AUTO IGNITION TEMPERATURE (°C):	NAV
LOWER FLAMMABLE LIMIT (% by volume):	NAV	UPPER FLAMMABLE LIMIT (% by volume):	NAV
SENSITIVITY TO IMPACT:	NAV	SENSITIVITY TO STATIC DISCHARGE:	NAV

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HAZARDOUS COMBUSTION PRODUCTS:	Oxides of nitrogen. Nitric acid.
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SECTION 5 – REACTIVITY DATA

CHEMICAL STABILITY: Stable under normal conditions

INCOMPATIBILITY:	Reactive with reducing agents, organic materials, acids. Slightly reactive with moisture.	CORROSIVE BEHAVIOUR:	NAV
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REACTIVITY AND UNDER WHAT CONDITIONS: Avoid contact with heat, sparks, flames, or other sources of ignition.

HAZARDOUS DECOMPOSITION PRODUCTS: Under fire- oxides of nitrogen, oxides of potassium.

SECTION 6 – TOXICOLOGICAL PROPERTIES

ROUTES OF ENTRY: Primary Route(s) of Exposure

SKIN CONTACT:	Yes	SKIN ABSORPTION:	-	EYE CONTACT:	Yes	INHALATION:	Yes	INGESTION:	Yes
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EFFECTS OF ACUTE EXPOSURE TO PRODUCT: Over-exposure Ingestion may cause gastrointestinal, vomiting and diarrhea.

INGESTION: Stomach pain, nausea, vomiting, and diarrhea.

INHALATION: Irritation of the respiratory tract.

EYE CONTACT: Irritation

SKIN CONTACT: Irritation

EFFECTS OF CHRONIC EXPOSURE: Repeated or prolonged exposure to the substance can cause anemia, dizziness, drowsiness, headache, shortness of breath, rapid heartbeat, cyanosis, kidney disease, unconsciousness.

EXPOSURE LIMITS: NAV

CARCINOGENICITY:	Not classified as listed by IARC, NTP, OSHA, EU, ACGIH	MUTAGENICITY:	NAP
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REPRODUCTIVE HAZARD:	NAV	TERATOGENICITY/ EMBRYOTOXICITY:	NAP
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IRRITANCY:	Yes	SENSITIZATION:	Yes
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SYNERGISTIC PRODUCTS: NAV

SECTION 7 – PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT:

Respiratory Protection: If exposure exceeds occupational exposure limits, use an appropriate NIOSH approved respirator. Respirator selection must be based on known or anticipated exposure level, the hazards of product and the safe working limits of the selected respirator.

Eye Protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin Protection: Normal work coveralls. Impervious boots. Cover body with lab coat.

Wear impermeable gloves. Butyl rubber gloves.

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation or other engineering control to keep airborne level below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

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HANDLING PROCEDURES:	Store in tightly-closed container. Avoid contact with combustible materials.
STORAGE REQUIREMENTS:	Keep containers tightly closed in cool, dry and well ventilated place. Separate from acids, alkalis, reducing agents and combustibles.
LEAK AND SPILL PROCEDURE:	Safely stop source of spill. Restrict non-essential personnel from area. All personnel involved in spill cleanup should avoid skin and eye contact by wearing appropriate personal protective equipment.
WASTE DISPOSAL:	The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of the product, solution and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

SECTION 8 – FIRST AID MEASURES

INHALATION:	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Get medical attention.
SKIN CONTACT:	Wash with soap and water. Get medical attention. Remove contaminated clothing and shoes. Get medical attention if symptoms occur/persists.
EYE CONTACT:	Check for and remove any contact lens. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if symptoms occur/persists.
INGESTION:	Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

SECTION 9 – DEPARTMENT OF TRANSPORTATION**SHIPPING INFORMATION**

Potassium Nitrate UN 1486, Class 5.1,
Packing group III, NAERG : 140
- DOT, IMDG/IATA

SECTION 10 – PREPARATION DATE OF MSDS

PREPARED BY: Agrisol Manufacturing Inc. 220 – 7565, 132 Street Surrey, BC, V3Z 1K7, Canada	ADDITIONAL INFORMATION: At the time of preparation, the information and data contained in this MSDS are believed to be accurate and have been compiled from sources that are believed to be reliable.
BUSINESS NUMBER:	604-805-2417
DATE:	October, 2015