

HYGROTECH

SUSTAINABLE SOLUTIONS

MATERIAL SAFETY DATA SHEET

No:
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COMPANY DETAILS

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1. PRODUCT AND COMPANY IDENTIFICATION

Trade name:	Hygrofert	Chemical abstract no: 7757-79-1/143-66-8
Chemical family:	Potassium Nitrate	NIOSH no. 231-818-8/205-605-5
Chemical name:	Calcium nitrate	Hazchem code:
Synonyms:	Nitre, saltpetre – Nitric Acid	UN no: 1486
Potassium Salt		

2. COMPOSITION

Hazardous components:	Potassium Nitrate , Magnesium sulfate , Hygroplex , Urea , Mono Ammonium Phosphate
EEC classification:	
R Phases:	R8, R25/36

3. HAZARDS IDENTIFICATION

Main hazard:	Strong oxidizer, contact with combustible materials causes fire.
Flammability:	High
Chemical hazard:	
Biological hazard:	
Reproductive hazard:	
Eye effects:	Irritation
Health effects – skin:	Mechanical irritation.
Health effects – ingestion:	Nausea, vomiting, diarrhoea.
Health effects – inhalation:	Respiratory irritation, convulsions, dyspnea, death.
Carcinogenicity:	
Mutagenicity:	
Neurotoxicity:	

4. FIRST AID MEASURES

INHALATION:	Remove to fresh air, if not breathing give artificial respiration, take to doctor.
CONTACT WITH SKIN:	Wash affected area with water and soap for 15min, remove all

	contaminated clothing, if irritation persists take to doctor.
CONTACT WITH EYES:	Flush eyes with water for 15min, lifting eyelids, take to doctor.
INGESTION:	Don't induce vomiting, give 2-4 cups of milk or water, seek medical attention.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING METHODS:	Cool container with a lot of water even after fire; do not use dry chemicals, carbon dioxide, halon or foam, ONLY USE WATER.
SPECIAL EXPOSURE HAZARDS:	Emits toxic gases when on fire. Material is a strong oxidizer and not compatible with combustible materials, containers may explode due to heat of fire.
SPECIAL PROTECTIVE EQUIPMENT:	Wear protective clothing to protect eyes, skin and face; also use breathing apparatus against toxic gases while fighting fire.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:	Wear all protective clothing when handling this material such as goggles, gloves, overalls, gumboots and respirator.
ENVIRONMENTAL PRECAUTIONS:	Do not use paper towel to sweep up material, clean up immediately.
SMALL SPILLS:	Vacuum or sweep up material, place in container, avoid generating dust, remove all sources of ignition, do this in ventilated area.
LARGE SPILLS:	

7. HANDLING AND STORAGE

SUITABLE MATERIAL:	Tightly closed container, ventilated area.
HANDLING/STORAGE PRECAUTIONS:	Do not store near combustible materials; store in a cool, dry and ventilated area; keep away from reducing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits:	
Engineering control measures:	Store area to be well ventilated and cool.
Personal protection - respiratory:	
Personal protection – hand:	Rubber gloves.
Personal protection - eye:	Eye protection.
Personal protection - skin:	Overalls
Other protection:	Boots

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM	
Appearance:	Solid white
pH:	4.5-7.0: 5% solution
Odour:	Odourless.
Boiling point:	N/A
Melting point:	
Flash point:	N/A
Flammability:	High
Autoflammability:	
Explosive properties:	High
Oxidizing properties:	Strong oxidizer.
Vapour pressure:	N/A
Density:	2.1

Specific gravity:	
Solubility – water:	Soluble
Solubility – solvent:	
Solubility – coefficient:	
Neurotoxicity:	

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID:	Incompatible materials, dust generation, combustible material, reducing agents.
MATERIALS TO AVOID:	Aluminum, titanium, antimony, germanium, zinc, zirconium, calcium disilicide, chromium nitride, metal sulfates, boron, carbon, sulfur, phosphorus, phosphides, sodium phosphinate, sodium thiosulfate, citric acid, tin chloride, sodium acetate, thorium carbide.
HAZARDOUS DECOMPOSITION PRODUCTS:	Nitrogen oxides, irritating and toxic fumes.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:	Toxic fume from fire.
SKIN AND EYE CONTACT :	Irritation LD50 =1901mg/kg , ld50= 3750mg/kg
CARCINOGENICITY:	Nitric acid potassium salt.
CHRONIC TOXICITY:	
MUTAGENICITY:	
REPRODUCTIVE HAZARDS:	

12. ECOLOGICAL INFORMATION

Aquatic toxicity - fish:	No information found.
Aquatic toxicity - daphnia:	No information found.
Aquatic toxicity - algae:	No information found.
Biodegradability:	No information found.
Bio-accumulation:	No information found.
Mobility:	No information found.
German wgk:	No information found.

13. DISPOSAL CONDITIONS

Disposal methods:	Vacuum or sweep up material, do not clean up with paper towels, do not generate dust when cleaning up, make sure area is well ventilated, wear all protective clothing.
Disposal of packaging:	Disposal in accordance with local legal provisions.

14. TRANSPORT INFORMATION

UN No.	1486
Substance identity no.	7757-79-1
ADR/RID class:	5.1
ADR/RID hazard identity no:	
IMDG – shipping name:	Potassium Nitrate
IMDG – class:	5.1
IMDG – packaging group:	III
IMDG – marine pollutant:	
IMDG – EMS no:	
IMDG – MFAG table no:	
IATA – shipping name:	

IATA – class:	
IATA – subsidiary risk(s):	
ADNR – class:	
UK – description:	
UK – emergency action class:	
UK – classification	
Tremcard no:	

15. REGULATORY INFORMATION

EEC hazard classification:	R8
Risk phases:	Danger, strong oxidizer.
Safety phases	
National legislation:	

16. OTHER INFORMATION

All information given in this data sheet is to the best of our knowledge. Because of the nature of the product, the user assumes all risk with respect to it. The data in this safety data sheet refer to the above product, but may not be valid for combination with other products or any other process. This data shall describe our product referring to questions of safety, but not declaration of quality or properties.