

Ghadeer Inc (M) Sdn. Bhd.

(Company No:842594-M)

Correspondence Address:
No. 14 Jalan Laksamana 10A,
Taman Mewah Jaya 3,
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GREEN SPOT LIQUID FERTILIZER

CHEMICAL SAFETY DATA SHEET

MATERIAL SAFETY DATA SHEET

Introductory Details

Page 1 of total 6:

Date of preparation: 05/05/2010

SECTION 1 : CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Details

Product Name : NPK Mixed Liquid Fertilizer
Trade Name : Green Spot Liquid Fertilizer
Chemical Name : N/A
Chemical Formula : Mixed Fertilizer containing at least 4 nutrients in
NPK
Molar Mass : N/A
Chemical Family : Fertilizer
Manufacturer's Code : N/A
Use : Used as additive to ground soil for the growth of vegetation

1.2 Company Identification

Manufacturer's Name and Address : Ghadeer Inc (M) Sdn Bhd
No.14 Jln Laksamana 10A,
Tmn Mewah Jaya 3,
41200 Klang, Selangor Darul Ehsan,
Malaysia.
Importer's Distributor's Name and Address : N/A
Telephone Number : 03-5162 2208
Emergency Telephone Number : 016-326 8848

1.3 Contact Point : Zulfiqar Ali Kha (Zack)

Designation : Managing Director

Handphone Number : 016-326 8848

Note: The contact point given should direct a caller to someone who can clarify information or provide further information and/or a bibliography of the product. The titles of a position or section should be inserted.

Page 2

SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENT

Chemical Name	CAS No.	Proportion	Exposure Limit	Toxicity Data
NPK	N/A	40%	TLV-TWA 10mg/l (Nuisance Particulates)	Ref. Section 11
Inerts	N/A	60%	TLV-TWA 10mg/l (Nuisance Particulates)	Ref. Section 11

Not classified as hazardous material according to EEC Directive 88/379/EEC.

SECTION 3 : PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Green/Blue/Grapish Liquid in colour
Odour	:	Mild
Solubility	:	100% Soluble in Water
Boiling Point	:	> 210 ⁰ C (decomposes) – stable under normal storage and handling conditions
Melting Point (⁰ C)	:	Depands on composition – may decompose before melting
Vapour Pressure (mm of Hg at 25 ⁰ C)	:	N/A
Percentage Volatiles	:	N/A
Evaporation Rate	:	N/A
Vapour Density	:	N/A
Specific Gravity	:	Bulk density between 1200-1350 kg/m ³
Flash Point	:	N/A
Autoignition temperature	:	N/A
Flammable limit (%) and	:	N/A
Oxidising Properties	:	N/A
PH Water solution	:	Usually >7.5pH
Other properties if applicable	:	N/A

SECTION 4 : HAZARD IDENTIFICATION

Most important hazards:

Fertilizers are basically harmless products when handled correctly.

On decomposition gives off water vapour and toxic fumes which may contain oxides of nitrogen, ammonia, hydrogen chloride, ammonium chloride, chlorine and other similar gases. Decomposition is accelerated by a number of substances such as acids, carbonaceous materials, chromates, zinc, copper and their alloys, chlorates and reducing agents.

Heating under strong confinement (e.g. in tubes or drains) may lead to a violent reaction or explosion, especially if there is contamination by substances mentioned above.

SECTION 5 : FIRST AID MEASURES

Ingestion	:	Do not induce vomiting. Give milk or water to drink. Obtain medical attention if more than small quantities have been swallowed.
Eye contact	:	Irrigate eyes with copious amount of eyewash solution or water for at least 10 minutes. Obtain medical advice if symptoms persist.
Skin contact	:	Wash the affected area with soap and water.
Inhalation	:	Remove from source of exposure to dust. Keep warm and at rest. Obtain medical advice if symptoms persist.
Notes to physician	:	If necessary.

SECTION 6 : FIRE FIGHTING MEASURES

Extinguisher Media	:	Use copious amount of water
Fire fighting instruction	:	<p>When the fertilizer is not directly involved in the fire use the best means available to control the fire. When the fertilizer is involved:</p> <ul style="list-style-type: none">- Avoid breathing the fumes. Wherever possible wear an approved mask when fighting a fire or when fumes are being emitted.- Use a Self-Contained breathing apparatus if fumes are being entered.- Call the fire brigade- Use plenty of water directed at the seat of the decomposition.- Open doors and windows to give maximum ventilation- Prevent any contamination of fertilizers by oils or other combustible materials- Do not use chemical extinguisher or foams or attempt to smother the fire with steam or sand- Do not allow molten fertilizer to run into drains <p>If water containing the fertilizer enters any drain or water course, inform the appropriate water authorities immediately.</p>
Special hazards	:	None

SECTION 7: ACCIDENTAL RELEASE MEASURE

Leak/Spill : Clean up spillage promptly. Sweep up and place in a clean appropriately labeled container. Depending on the degree of contamination, dispose off by use on farm/plantation by mixing with water and spreading thinly on open ground or to an authorized waste facility. Take care to avoid the contamination of watercourses and drains. Inform the appropriate water authority in the event of accidental watercourse contamination.

SECTION 8: HANDLING AND STORAGE

Handling : Avoid excessive generation of heat.

Storage : The basic requirements are the avoidance of involvement in a fire and contamination. Locate away from sources of heat, fire or explosion. Keep away from combustible materials and chemicals substances taking particular care on farms to ensure that it is not stored near hay, grain, diesel, etc. Ensure high standard of house-keeping in the storage areas. Do not permit smoking or the use of naked lights in the storage area. Buildings used for storage should be dry and well ventilated, stacks therein should be at least 1 metre from walls, eaves and beams.

SECTION 9: EXPOSURE CONTROL AND PERSONAL PROTECTION

- a. Exposure Limit : No specific official limit.
- b. Engineering Measures : Provide local ventilation where necessary.
- c. Personal Protection : Wear suitable gloves when handling the product over long periods.

SECTION 10: STABILITY AND REACTIVITY

The product is stable under normal conditions of storage, handling and use.

Condition to avoid	:	Contamination by incompatible materials. Unnecessary exposure to atmosphere. Closeness to source of heat or fire.
Incompatibles	:	Combustible materials, reducing agents, acids, alkalis, chlorates, chlorides, chromates, nitrates, permanganates, metallic powders and substances containing metals such as copper, nickel, cobalt, zinc and their alloys.
Decomposition Products	:	When in contact with alkaline materials such as lime may give off ammonia gas
Hazardous Polymerization	:	N/A

SECTION 11: TOXICOLOGICAL INFORMATION

Product toxicity would depend on the composition

Toxicity Data	:	Urea – LD50 (oral, rat). Diammonium Phosphate – LD50 (oral, rat), >2000 mg/kg Potassium Chloride or Sulphate – LD50 (oral, rat) > 2000 mg/kg
Carcinogenicity	:	N/A
Reproductive Effect	:	N/A
Effects of overexposure	:	N/A
Chronic effects	:	N/A
Target organs	:	N/A
Medical Conditions Generally Aggravated by exposure	:	N/A

SECTION 12: ECOLOGICAL INFORMATION

Mobility	:	The ammonium ion (NH_4^+) is absorbed by soil particles, phosphates, and are water soluble are translocated in the soil over very short distances and are then immobilized. The dissolved K^+ ion in the soil solution can be absorbed.
Bioaccumulation	:	Product does not show any bioaccumulation phenomena
Biodegradability	:	Nitrogen follows the natural nitrification/denitrification cycle to give nitrogen or nitrogen oxides. Phosphates are converted to calcium or iron/aluminium phosphates, or are incorporated into the organic soil matter.
Aquatic Toxicity	:	Low toxicity to aquatic life

SECTION 13: DISPOSAL INFORMATION

Disposal method in accordance with all applicable national environment laws and regulations.

SECTION 14: TRANSPORT INFORMATION

-	Miscellaneous dangerous substances	:	Non-Hazardous
-	Packaging information	:	Non-hazardous
-	Any other special requirements	:	Away from source of heat or fire: Capable of self-sustaining Decomposition

SECTION 15: REGULATORY INFORMATION

This section should contain information on proposed classification, risk phrase and safety phrase : N/A

SECTION 16: OTHER INFORMATION

The information in this safety data sheet is given in good faith and belief in its accuracy based on our knowledge of the substance/preparation concerned at the date of publication. It does not imply the acceptance of any legal liability or responsibility whatsoever by the Company for the consequences of its use or misuse in any particular circumstances.