



Spraygro Liquid Fertilizers

A.B.N. 47 007 974 496

Top Up Plus

Material Safety Data Sheet

Date last revised 23/8/2007

I. General Information

Chemical Name & Synonyms:

Nitrogen-Phosphorous Solution with trace elements.

Chemical Family:

Liquid Fertilizer

Proper DOT Shipping Name:

Not Regulated

Manufacturer:

Foliar Fertilizers Pty Ltd

Manufacturer's Address:

Gillman, Adelaide, South Australia

Trade Name & Synonyms:

Top Up Plus

Formula:

9 : 14 : 0, 1.8Mn, 1Zn, 0.20Cu, 1.5S

DOT Hazard Classification:

N/A

Manufacturer's Phone Number:

Phone: 08 8447 7266 Fax: 08 8240 1844 – Head Office

0438 897 977 – Product Chemist

0407 606 409 – Brett Kearsley

II. Ingredients

Principal Hazardous Components:

None

Percent:

None

Threshold Limit Value (units)

N/A

III. Physical Data

Boiling Point (°C)

Loses Water @ 100°C

Vapour Pressure (mm Hg.)

Not determined

Solubility in Water:

Complete

Appearance & Odour:

Clear, green liquid with ammoniacal odour

Specific Gravity (H₂O=1)

1.320 ± 0.010

Percent Volatile By Volume (%)

N/A

Evaporation Rate (_____ =1)

N/A

pH

1.5-2.5

IV. Fire & Explosion Hazard Data

Flash Point (Test Method)

Non Flammable

Flammable Limits:

None

Extinguishing Media:

This solution is essentially non-flammable. If involved in a fire, use water. All standard agents are acceptable (water, dry chemical, Carbon Dioxide, halon and foam).

Special Fire Fighting Procedures:

Due to possible evolution of ammonia, wear self-contained breathing apparatus approved by NIOSH. Use water spray to keep containers cool.

Unusual Fire & Explosion Hazards:

When heated, it may give off ammonia fumes.

Auto Ignition Temperature:

N/A

LEL:

N/A

UEL:

N/A

N/A: Not Available



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V. Health Hazard Data

OSHA Permissible Exposure Limit:

Not determined

Carcinogen-NTP Program:

N/A

Symptoms of Exposure:

Skin irritation, redness and pain.

Medical Conditions Aggravated by Exposure:

Vomiting, gastric, ulcers and shortness of breath.

Primary Route(s) of Entry:

Damaged skin, wounds and spray fumes.

Emergency First Aid:

Eyes: Flush immediately for 15 minutes. Skin: Flush immediately and thoroughly with water. Ingestion: If conscious, immediately give large quantity of water but do not induce vomiting. Consult a physician promptly. Treat symptomatically.

ACGIH Threshold Limit Value:

N/A

Carcinogen-IARC Program:

N/A

V I. Reactivity Data

Stability

| | |
|---|----------|
| | Unstable |
| X | Stable |

Conditions To Avoid:

High Temperatures

Material To Avoid:

Zinc alloys, copper bearing alloys and aluminium.
Water reactive materials, oxidising agents and strong alkalis.

Hazardous Decomposition Products:

Ammonia

V I I. Environmental Protection Procedures

Spill Response:

Contain Spill and maximise recovery. Sand and/or cat litter would be suitable absorbants Mop up or pump into metal or plastic drum. Do not contaminate drains.

Waste Disposal Method:

Comply with your local, state and federal regulations.

V I I I. Special Protection Information

Eye Protection:

Safety glasses and goggles recommended. If contaminated, flush with cold fresh water.

Respiratory Protection (Specific Type)

NIOSH for ammonia

Other Protection:

Wear overalls to protect clothes contamination.

Skin Protection:

Rubber coated gloves and clothes

Ventilation Recommended:

Natural Ventilation

I X. Special Precautions

Hygienic Practices in Handling & Storage:

Acidic product, wash hands and face after use. Do not store with food, food items, packets, containers and cartons. Store away from alkalis.

Other Precautions:

Avoid using containers, pipes and fittings made of zinc clad, copper bearing alloys or aluminium. Storage in open containers may result in formation of an ammonium phosphate solid on walls. Protect from physical damage. Aluminium tanks not recommended because of possible pitting. The solution is non-flammable, if involved in a fire, use water. Do a bucket test if mixing this product with others. Keep out of reach of children and pets.

X. Environmental Information

Acute toxicity to fish:

96 Hours LC₅₀: OECD Guidline 203 (rainbow trouts) undergoes ionic dissociation in water. Disposer must comply with disposal and discharge laws.

N/A: Not Available

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