SAFETY DATA SHEET

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1. IDENTIFICATION OF THE PREPARATION AND COMPANY

1.1 Name of Preparation:

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1.1 Intended Use:

As an agricultural/horticultural/amenity fertiliser

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1.1 Supplier Details:

De Sangosse Ltd, Swaffham Bulbeck, Cambridge CB5 OLU,UK Telephone number: 01223 811215 (outside UK: + 44 1223 811215) Fax number: 01223 810020 (outside UK: + 44 1223 810020) Emergency Telephone Number: Office hours 01223 811215,

After Office hours: 01638 577581 or 01485 544230

2. Information on ingredients

THIS PREPARATION IS CLASSIFIED AS DANGEROUS UNDER DIRECTIVE 2001/59/EC

2.1 Composition:

Product code L168A-D

Hazardous Components -

Manganese Nitrate (as a prepared solution)

CAS 10377-66-9 C; O; R8; R34: R41; S17; S36/37/38

Zinc Nitrate

CAS 7779-88-6 Xn; N; R22; R50/53

3. HAZARDS IDENTIFICATION

3.1 Classification of Preparation:







OXIDISING CORROSIVE

DANGEROUS FOR THE ENVIRONMENT

3.2 Primary Hazards:

CONTACT WITH COMBUSTIBLE MATERIAL MAY CAUSE FIRE CAUSES BURNS

TOXIC TO AQUATIC ORGANISMS; MAY CAUSE LONG TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.

4. First Aid Measures

4.1 Any special measures:

4.2 Inhalation:

May cause irritation of the respiratory tract. Remove from source of exposure to fresh air; may cause irritation; seek medical attention.

4.3 Skin & eye exposure:

May cause burns. Rinse immediately with plenty of water. Seek medical advice. Eyes: irrigate with copious amounts of clean water for at least 10 minutes. Seek medical advice

4.4 Ingestion:

May cause irritation & burns to the gastro-intestinal tract. Do not induce vomiting. Seek medical advice.

5. FIRE FIGHTING MEASURES

5.1 Suitable extinguishing media:

Not flammable

5.2 Unsuitable extinguishing media:

As appropriate for surrounding fire

5.3 Special hazards, combustion or by products:

Combustion gases may cause irritation.

5.4 Protective clothing for fire fighting:

Suitable protective clothing and breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions:

Prevent contact with skin or eyes

6.2 Environmental precautions:

Do not wash excessive spillages into water courses. If this product enters water course or sewer (including via contaminated soil & vegetation) contact local agency and/or police immediately. Do not burn.

6.3 Clean & disposal methods:

Use soil, sand or other absorbent material. Contact specialist waste disposal contractor.

7. HANDLING AND STORAGE

7.1 Practical precautions & engineering controls for safe handling:

Open container with care to avoid splashes.

7.2 Conditions and quantity limits for safe storage:

Store in a cool, dry atmosphere in original, labelled containers.

Do not store in metal or alloy packaging. Store frost free conditions ideally above 7°c. Refer to manufacturer for maximum safe stacking height.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Exposure limit values:

Not determined for product..

Under EH40, OEL as follows:

Manganese compounds (as Mn) = 5mg/m^3 (8 hour TWA)

Manganese fume (as Mn) = 1.0 mg/m^3 (8 hour TWA)

8.2 Occupational exposure controls:

Ensure suitable engineering controls for measuring and decanting of product prior to mixing.

8.3 Personal Protective Equipment:

Primary Hazard considered as handling of concentrate.

Body: Wear suitable protective suit, with splash protective for acid liquids. Gloves: BS EN374 Chemical protection - physical barrier protection only;

Eye Protection: goggles/face shield to BS EN166. Respirator: BS approved protection device with P3 filter

9. PHYSICAL AND CHEMICAL PROPERTIES

9.01 Appearance: Pale pink liquid

9.02 Odour: not specified

9.03 pH: 0.0 – 2.0

9.04 Boiling point/range: not specified

9.05 Flash Point/Flammability: not classified as flammable

9.06 Explosive properties: not classified as explosive

9.07 Oxidising properties: classified as Oxidising by calculation method

9.08 Vapour pressure: not specified

9.09 Relative Density: 1.36 – 1.40

9.10 Solubility: not specified

9.11 Partition coefficient: not specified

9.12 Viscosity: not specified

9.13 Vapour density: not specified

9.14 Evaporation rate: not specified

10. STABILITY AND REACTIVITY

10.1 Materials to avoid:

Metals;

10.2 Conditions to avoid:

Temperatures below 7°c.

10.3 Hazardous decomposition products:

Irritant fumes

 $\frac{11.\, Toxicological\, information}{The\, Preparation\, has\, not\, been\, assessed\, at\, all\, for\, this\, end-point,\, so\, its\, hazardous}$ property in this regard is not known.

12. ECOLOGICAL INFORMATION

Classified as harmful to the environment.

12.1 Ecotoxicity:

No specific data available

12.2 Mobility:

No specific data available

12.3 Persistence & degradability:

No specific data available

12.4 Bioaccumulative potential:

No specific data available

13. DISPOSAL CONSIDERATIONS

13.1 Disposal of used preparation:

Dispose in accordance with local regulations via specialised waste contractor.

13.2 Disposal of packaging:

Use specialist waste contractor in accordance with local regulations. Do not remove labels from containers.

14. Transport information

14.1 Specific Transport requirements

ROAD

Proper Shipping Name: Oxidising liquid, Corrosive, n.o.s. (Manganese Nitrate)

Classification; 5.1 (8)
UN Number; UN3098
Packing Group; III
Transport Category; 3

SEA

Proper Shipping Name: Oxidising liquid, Corrosive, n.o.s. (Manganese Nitrate)

Classification; 5.1 (8)
UN Number; UN3098
Packing Group; III
Marine Pollutant: No

AIR

Proper Shipping Name: Oxidising liquid, Corrosive, n.o.s. (Manganese Nitrate)

Classification; 5.1 (8) UN Number; UN3098 Packing Group; III

15. REGULATORY INFORMATION

This preparation is classified and labelled in accordance with both regulation 2001/59/EC and The Fertiliser Regulations 1991.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S36/7/9: Wear suitable protective clothing, gloves & eye/face protection S57: Use appropriate containment to avoid environmental contamination.

16. Other information

R8: Contact with combustible material may cause fire

R34: Causes burns

R51-53: Toxic to aquatic organisms & may cause long term adverse effects in the aquatic environment.

Compiled using data submitted for raw materials and practical experience.

This product is intended for professional users only.

This Safety Data Sheet is prepared in compliance with Directive 2001/59/EC. The information given herein is, to the best of our knowledge, correct and is presented in good faith but no warranty, expressed or implied is given.

19 July 2005