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MATERIAL SAFETY DATA SHEET

SCRUBBER 240 SL

19 April 2012

1. PRODUCT AND COMPANY IDENTIFICATION

SUPPLIER: Future Farm & Forest Services & Supplies (Pty) Ltd

P O Box 98165 Sloane Park

2152 (011) 463 5842

EMERGENCY TELEPHONE NUMBERS

SPILLAGES: SPILL TECH

Emergency telephone 031 206 0919 or

Fax 031 205 4043

POISONINGS:

Griffon Poison Centre 082 446 8946

Product Name: SCRUBBER 240 SL HERBICIDE

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components contributing to hazard:

Picloram potassium 240 g/ a.e Salt (278 g/L)

Inert ingredients Balance

NIOSH/RTEC no: TJ7525000 (for acid)
UN no: Not regulated

3. HAZARDS IDENTIFICATION

Harmful to aquatic organisms. May cause sensitization by skin contact. May cause severe eye irritation.

4. FIRST-AID MEASURES

Never give fluids or induce vomiting if patient is unconscious or is having convulsions.

Ingestion

Do not induce vomiting. Call a physician. The decision of whether to induce vomiting or not should be made by an attending physician.

Eye Contact

Irrigate immediately with water for at least 5 minutes. Consult a physician if irritation persists.



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Skin Contact

Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Wash contaminated clothing before reuse.

Inhalation

Remove to fresh air. Consult a physician.

Note to Physician

Supportive care. Treatment based on judgement of physician in response to symptoms of patient.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Water fog or fine spray. Carbon dioxide. Dry chemical. Foam.

Hazardous Combustion Products

During a fire, smoke may contain the original material in addition to unidentified toxic and/or irritating compounds.

Protection of Firefighters

Wear protective clothing and use self-contained breathing apparatus.

Additional Information

Keep containers cool by spraying with water. Contain runoff to prevent entry into water or drainage systems.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Wear appropriate safety clothing and eye/face protection (see Section 8). Prevent skin contact.

Environmental Precautions

Do not wash into sewers or into any body of water. Advise water authority if spillage has entered water course or drainage system.

Methods of Cleaning Up

Soak up with sand or other non-combustible absorbent material and place into containers for disposal. For large spills, barricade area and consult manufacturer. If further assistance is required, telephone the emergency contact number.



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7. HANDLING AND STORAGE

Handling

Use good personal hygiene. Do not consume or store food in the work area. Wash hands and exposed skin before eating, drinking or smoking and after work. Avoid skin contact. Remove contaminated clothing immediately and wash skin area with plenty of water.

Storage

Product should be stored in compliance with local regulations. Store in a cool, dry, well-ventilated place in the original container. Protect from excessive heat and cold. Do not store near food, drink, animal feeding stuffs, pharmaceuticals, cosmetics or fertilisers. Keep out of reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Picloram: ACGIH Threshold Limit Value (TLV) is 10 mg/m3 TWA-8 hours.

Engineering Controls

Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

Respiratory Protection

When airborne exposure guidelines and/or comfort levels may be exceeded, use an approved air-purifying respirator. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus.

Hand/Skin Protection

For brief contact, no precautions other than clean body-covering clothing and chemical resistant gloves should be needed. For emergency conditions: Use protective clothing impervious to this material. Selection of specific items will depend on operation.

Eye/Face Protection

Use safety glasses. Where contact with the liquid is likely, chemical goggles are recommended.



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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid
Colour : dark brown

Rel. density (water=1) : 1.148 g/cm3 (approx.)
Boiling point/range : 100 deg.C (approx.)

oH : 9.0-11.2

Vapour pressure : 22 mmHg/20 deg.C (approx.)

Flash point :>100 deg.C (TCC)

Water solubility : miscible

10. STABILITY AND REACTIVITY

Chemical Stability

Is stable under normal storage conditions.

Conditions to Avoid

Avoid extremes of temperature.

Materials to Avoid

Strong basic, acidic or oxidising materials.

Hazardous Decomposition Products

None under normal conditions of storage and use.

11. TOXICOLOGICAL INFORMATION

Ingestion

Single dose oral toxicity is considered to be low.

The oral LD50 for rats is >5000 mg/kg.

Skin Contact

The dermal LD50 for rabbits is >5000 mg/kg.

A single prolonged exposure is not likely to result in the material

being absorbed through skin in harmful amounts.

Prolonged or repeated exposure may cause slight skin irritation.

Sensitisation

Sensitising to guinea pig skin.

Eye Contact

May cause severe eye irritation. Corneal injury is unlikely. Effects likely to heal readily.

Inhalation

No adverse effects anticipated by this route of exposure incidental to proper handling. The LC_{50} for rats for 4 hours is >8.11 mg/L.



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12. ECOLOGICAL INFORMATION

Assessment largely or completely based on data for active ingredient.

Persistence and Degradability

The major route of degradation is by photolysis and photodegradation. Microbial degradation leads to formation of parent acid which undergoes further degradation. Half-life of the parent acid in soil is dependent on conditions and is approximately 10-278 days. Bio-concentration potential is low (BCF <100 or Log Pow <3).

Aquatic Toxicity

Based on the acid. Slightly Toxic To Aquatic Organisms Acute LC50 for daphnids is reported to be 68mg/L. Algal toxicity EC50 for green algae is 37mg/L.

Based on data for the formulation.

Acute LC50 for sheepshead minnow (Cyprinodon variegatus) is >100 mg/L.

Avian Toxicity

Based on data for the formulation. Practically Non-Toxic To Birds Dietary LC50 for mallard duck is >10mg/kg of diet. Dietary LC50 for bobwhite quail is >10mg/kg in the diet.

Other Information

Active ingredient:

Material is practically non-toxic to bees on an acute basis.

Grazing:

Picloram has no significant grazing restrictions. Beef cattle can even be present in the pasture during treatment. For lactating dairy cows, allow 14 days after applying Access 240 SL. Picloram is rapidly excreted in unchanged form by the animal via urine. Delay transferring livestock from treated areas onto land seeded with a desirable broadleaf crop for seven days. Urine and manure may otherwise injure sensitive broadleaf plants.

13. DISPOSAL CONSIDERATIONS

Do not contaminate ponds, waterways or ditches with chemical or used container. Wash out thoroughly. Container and washings must be disposed of safely and in accordance with applicable regulations. The preferred options are to send to licensed reclaimer or to permitted incinerators. Do not re-use container for any purpose.

14. TRANSPORT INFORMATION

Sample shipment not allowed by mail. Product is not classified for any mode of transportation.



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15. REGULATORY INFORMATION

Hazard Symbol: Xi - Irritant

Risk Phrases: May cause sensitisation by skin contact. (R43)

Irritating to eyes.(R36)

Safety Phrases: Keep out of reach of children. (S2)

Keep away from food, drink and animal feeding stuffs.

(S13)

When using do not eat, drink or smoke. (S20/21)

Avoid contact with skin. (S24)

Wear suitable protective clothing, gloves and

eye/face protection. (S36/37/39)

National Legislation:

In accordance with the South African National Road Traffic Act, 1996 (Act 93 of 1996), the Fire Brigade act, 1987 (Act 99 of 1987) and the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993).

16. OTHER INFORMATION

This Material Safety Data Sheet complies with basic South African and EU regulatory requirements for Safety Data Sheets on the date of publication, and is intended for translation and adaptation into European National documents. This document should NOT be relied upon for compliance with the laws and regulations of individual countries without the appropriate local translations and adaptations. It is your responsibility to ensure that any Safety Data Sheet taken or adapted from this system for re-distribution or use complies with all the laws and regulations which apply to any such use or re-distribution.