

PAGE 1 OF 6

MATERIAL SAFETY DATA SHEET

18/10/07

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Supplier DOW AGROSCIENCES (PTY) LTD

Private Bag X160,

Bryanston.

2021

SPILLAGES:

Emergency telephone (+27) 032 5330716 or 082 887 8079

Fax (+27) 032 5336134

POISONINGS:

National Poison Centre 021-9386084 (office hours).

021-9316129 (after hours).

UOFS Pharmacology/Toxicology information centre:

0824910160

Product Name: RUNNER 240SC INSECTICIDE

Revised: May 08 (14, 16)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Dangerous components (see section 16 for complete R-phrases):

CAS EC No

Methoxyfenozide 21-24 % N; R51/53 161050-58-4

Inert ingredients Balance

UN no.: Not Regulated.

3. HAZARDS IDENTIFICATION

For aquatic organisms, material is expected to be Harmful.

4. FIRST-AID MEASURES

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

Ingestion

Do not induce vomiting. Drink large amounts of water and call a physician. The decision of whether to induce vomiting or not should be made by a physician.

Eye Contact

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



PAGE 2 OF 6

MATERIAL SAFETY DATA SHEET

18/10/07

RUNNER 240SC INSECTICIDE

Skin Contact

Remove contaminated clothing. Wash skin thoroughly with soap and water. Wash contaminated clothing before reuse.

Inhalation

Remove to fresh air. Consult a physician.

Note to Physician

No specific antidote. 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 powder. Foam.

Hazardous Combustion Products

During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/ or irritating.

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. Avoid breathing smoke. Work upwind of any spill.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

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

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.



PAGE 3 OF 6

MATERIAL SAFETY DATA SHEET

18/10/07 RUNNER 240SC INSECTICIDE

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.

Storage

Product should be stored in compliance with local regulations. Store in a cool, dry, well-ventilated place in the original container. 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

None established.

Engineering Controls

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

Respiratory Protection

For most conditions, no respiratory protection should be needed. However, 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. When prolonged or frequently repeated contact could occur, use protective clothing impervious to this material.

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.



PAGE 4 OF 6

MATERIAL SAFETY DATA SHEET

: liquid

18/10/07 RUNNER 240SC INSECTICIDE

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Colour : white to light tan

Rel. density (water=1) : 1.10 g/cm3
Melting point/range : 0 deg.C
Boiling point/range : 100 deg.C

Flash point : none (water based)

Water solubility : disperses pH typical range : 6.5-7.5

10. STABILITY AND REACTIVITY

Chemical Stability

Is stable under normal storage conditions.

Conditions to Avoid

Avoid extremes of temperature.

Materials to Avoid

Avoid contact with: Strong oxidising agents.

Hazardous Decomposition Products

None known.

11. TOXICOLOGICAL INFORMATION

Assessment largely or completely based on data for active ingredient.

Ingestion

Low toxicity if swallowed. The oral LD50 for rats is >5000 mg/kg.

Skin Contact

The dermal LD50 for rats is >2000mg/kg. Prolonged skin contact is unlikely to result in absorption of harmful amounts. Short single exposure is not likely to cause skin irritation.

Sensitisation

Non-sensitising to guinea pig skin.

Eye Contact

May cause slight temporary eye irritation.

Inhalation

No adverse effects anticipated by this route of exposure incidental to proper handling. The LC50 for inhalation in rats is greater than the maximum attainable.



PAGE 5 OF 6

MATERIAL SAFETY DATA SHEET

18/10/07 RUNNER 240SC INSECTICIDE

Additional Information

Not carcinogenic. Not mutagenic. Not toxic for reproduction.

12. ECOLOGICAL INFORMATION

Assessment largely or completely based on data for active ingredient.

Persistence and Degradability

Average half-life in water is 77 days. Half-life in soils is dependent on soil type and conditions and is approximately 23-268 days.

Aquatic Toxicity

Acute LC50 for fish is reported to be greater than the maximum saturation level.

Material is toxic to aquatic invertebrates on an acute basis $(1mg/L \le C50 < 10mg/L)$.

Algal toxicity (EC50) for green algae is reported to be greater than maximum saturation level.

Avian Toxicity

Material is practically non-toxic to birds on an acute basis (LD50 $>2000 \,\mathrm{mg/kg}$).

Additional Information

LD50 for earthworms is >1000mg/kg. LD50 for bees is >100 microgram/bee.

13. DISPOSAL CONSIDERATIONS

For aquatic organisms, material is expected to be Harmful. 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.

15. REGULATORY INFORMATION

Hazard Symbol: None required

Risk Phrases: None required.



PAGE 6 OF 6

MATERIAL SAFETY DATA SHEET

18/10/07 RUNNER 240SC INSECTICIDE

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

Keep away from food, drink and animal feeding stuffs

(S13).

16. OTHER INFORMATION

REFERENCES

- The Pesticide Manual; Thirteenth Edition; Editor Clive Tomlin; Crop Protection Publications, 2003.
- IMDG CODE, Vol. 2, 2004 Edition.
- ADR, Vol.1 1 January 2005
- SABS 0265:1999.
- ECB-ESIS (European chemical Substances Identification System.

All information and instructions provided in this Material Safety Data Sheet MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and is presented in good faith and believed to be correct. This information applies to the PRODUCT AS SUCH. It is the responsibility of persons in receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product.

END OF MSDS.