



# MATERIAL SAFETY DATA SHEET

## ROSECARE RTU

**Date Issued:** April 2014 and is valid for 3 years from this date.  
**Revision No.:** 2  
**Print Date:** 3/10/14

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### 1. PRODUCT AND COMPANY IDENTIFICATION

**TRADE NAME:** ROSECARE RTU

**SUPPLIER:** EFEKTO

PO BOX 652147

BENMORE

2010

**TEL No.** 011 287 5700

**EMERGENCY TELEPHONE NUMBERS:**

**SPILLAGES:** 083 1233 911

**Fax:** 086 685 3129

**POISONINGS:**

**National Poison Centre** 021-9386084 (office hours).

021-9316129 (after hours).

082 446 8946

**Use:** A ready to use contact insecticide, plus a systemic fungicide for the control of various pests on Roses.

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### 2. HAZARDS IDENTIFICATION

- Harmful

**Likely routes of exposure:** May be absorbed through the intact skin, and through inhalation of fine mist.

**Eye contact:** The product is non- irritating.

**Skin contact:** The product is non- irritating.

**Ingestion:** Harmful by ingestion.

**Inhalation:** Harmful by inhalation.

**Carcinogenicity/ Mutagenicity/ Neurotoxicity/Reproductive /Teratogenicity:**

None of the two active ingredients have any genotoxic effects.

**UN No.:** Not regulated for any mode of transport.

**Symbols:** None

**Risk-phrase(s):** None

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Active ingredients:**



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Active ingredients.	CAS No.:	EC No.:
Bifenthrin 0.0 2 g/l	82657-04-3	82657-04-3
Myclobutanil 0.0 75 g/l	88671-89-0	88671-89-0
Inerts Balance	-	

**Chemical Name:**

**Bifenthrin:** (2-methyl-1,1-biphenyl-3-yl)-methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl cyclopropanecarboxylate (IUPAC)

**Myclobutanil:** 2-(4-chlorophenyl)-2-(1H-1,2,4-triazol-1-ylmethyl)hexanenitrile.

**Chemical Family:**

**Bifenthrin:** Pyrethroid

**Myclobutanil:** Triazole

**Chemical Formula:**

**Bifenthrin:** C<sub>23</sub>H<sub>22</sub>ClF<sub>3</sub>O<sub>2</sub>

**Myclobutanil:** C<sub>15</sub>H<sub>17</sub>ClN<sub>4</sub>

**NIOSH/RTECS No.:** -

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#### 4. FIRST-AID MEASURES

**Skin contact:**

In case of contact with skin, remove contaminated clothes and carefully wash affected areas of skin with water.

**Eye contact:**

In case of contact with eyes, rinse immediately with plenty of water for 20 minutes.

**Ingestion:**

If swallowed, seek medical advice immediately and show this container or label

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

Keep the victim under medical control.

**Advice to physician:**

No antidote. Treat symptomatically.

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#### 5. FIRE-FIGHTING MEASURES

**Recommended fire-fighting media:** foam, carbon dioxide, dry powders, and water spray.

Wear self-contained breathing apparatus

**Special protective equipment for fire-fighters:**

In the event of fire and/or explosion do not breathe fumes. Wear self contained breathing apparatus for fire fighting if necessary.

**Specific hazards during fire fighting:**



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Not flammable; danger of toxic gases in smoke in case of fire: Carbon and Nitrogen oxides, hydrofluoric and hydrochloric acid.

Avoid the escape of fire-fighting water to the environment.

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### 6. ACCIDENTAL RELEASE MEASURES

Recover the product by pumping, suction or absorption using dry and inert absorbent clay.

Absorb the leakage using dry sand or earth.

Shovel up and place into a labelled tightly closed container.

To dispose of material, refer to section 13, "Waste and disposal consideration"

Avoid contact with skin and eyes. For personal protection see Section 8.

**Environmental precautions:**

Do not allow entering drains or watercourses. When the product contaminates public waters, inform appropriate authorities immediately in accordance with local regulations.

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### 7. HANDLING AND STORAGE

**Handling:**

When using do not eat, drink or smoke **Storage:**

Keep out of the reach of children Keep away from food, drink and animal feeding stuffs

Recommended material for packaging: co extruded polymer barrier.

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guidelines:**

**Myclobutanil:** Dow AgroSciences recommendation is 1.0 mg/m<sup>3</sup>.

**Bifenthrin:** TLV: Not Available.

**Engineering control measures:**

It is essential to provide adequate ventilation. The measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

**PERSONAL PROTECTIVE EQUIPMENT:**

If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable personal protective equipment including approved respiratory protection.

**Respirator:**

An approved respirator suitable for protection from dusts and mists of pesticides is adequate. Limitations of respirator use specified by the approving agency and the manufacturer must be observed.

**Clothing:**

Workers must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with the substance.

**Gloves:**

Workers must wear appropriate synthetic protective gloves to prevent contact with this substance.



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**Eye protection:**

**Emergency eye wash:** Where there is any possibility that an workers's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** A clear red liquid.

**Flammability:** Non-flammable.

**Flash point:** Not applicable.

**Density:** 1,000 g/ml

**pH:** 4,3 (for formulated product).

**Solubility in water:**

The product is water based and will mix with water.

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### 10. STABILITY AND REACTIVITY

**Stability:**

Stable for 2 years under normal storage conditions. Avoid extremes of temperature and direct sunlight.

**Reactivity:**

No dangerous reaction known under normal conditions of use.

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### 11. TOXICOLOGICAL INFORMATION

**Acute oral LD50 :** >2000 mg/kg in rats.

**Acute dermal LD50 :** >2000 mg/kg in rats.

**Acute inhalation LC50 :** No data.

**Acute skin irritation:** The product is not irritating to skin.

**Acute eye irritation:** The product is not irritating to eyes.

**Dermal sensitisation:** Not a skin sensitizer.

**Carcinogenicity/ Teratogenicity/ Teratogenicity/ Mutagenicity:**

None of the two active ingredients have any genotoxic effects.

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### 12. ECOLOGICAL INFORMATION

**Birds:**

**Myclobutanil** is practically non-toxic to birds on a dietary basis (LC<sub>50</sub> is >5000 ppm).

Material is slightly toxic to birds on an acute basis (LD<sub>50</sub> is between 501 and 2000 mg/kg).

**Bifenthrin** is only slightly toxic to both water fowl and upland game birds (LD<sub>50</sub> values range from 1,800 mg/kg to >2,150 mg/kg).

**Fish and Daphnia:**



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**Myclobutanil and Bifenthrin** is toxic to fish and other aquatic life.

**Bees:**

**Bifenthrin** is Toxic to bees. Oral LD<sub>50</sub>: 0,1 g/bee.

**Myclobutanil:** Acute oral LD<sub>50</sub> in honeybee (*Apis mellifera*) is >171 µg/bee

**Algae LC<sub>50</sub> (96h):**

**Myclobutanil:** 2, 4 mg/kg.

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### 13. DISPOSAL CONSIDERATIONS

**Pesticide disposal:**

Landfill in a government approved landfill, if no incinerator is available.

Contaminated absorbents, surplus product, etc., should be burned at 1000°C in a high-temperature incinerator with effluent gas scrubbing. Before disposal of the resultant waste, the material must be analysed to ensure that the active ingredient has been degraded to a safe level. Never pour untreated waste or surplus products into public sewers or where there is any danger of run-off or seepage into water systems. Comply with local legislation applying to waste disposal.

**Package product wastes:**

If container is broken, handle with rubber gloves. Emptied containers retain vapour and product residues. Triple rinse containers before disposal. Observe all labelled safeguards until container is destroyed.

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### 14. TRANSPORT INFORMATION

**UN NUMBER** Not regulated for any mode of transport

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### 15. REGULATORY INFORMATION

**Symbol:** None

**Indication of danger:** None

**Risk phrases:** None

**Safety phrases**

**S 2** Keep out of reach of children

**S 13** Keep away from food, drink and animal feeding stuffs.

**S15** Keep away from heat.

**S 20/21** When using do not eat, drink or smoke.

**S24/25** Avoid contact with skin and eyes.

**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)

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### 16. OTHER INFORMATION

**Compiled by:** Danie Fourie

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 are presented in good faith and believed to be correct. This information applies to the PRODUCT AS SUCH. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear.

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. If the recipient subsequently produces formulations(s) containing this product, it is the recipients sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.

### REFERENCES

- The Scotts Company (UK) Ltd; Roseclear2 MSDS, Sept. 2000
- Similar product MSDS, 17/11/2006
- ECB-ESIS (European chemical Information System).
- ADR 2011, Part 3.
- IMDG Code, 2005 Edition, Vol. 2.
- IATA Dangerous goods regulations, Effective 1 January 2011

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**END OF MSDS.**