

	MATERIAL SAFETY DATA SHEET	Page : 1
		Revised edition no : 1
		Date : 20/12/2004
		Supersedes : 0/0/0
RIMON 10 EC		R-9074_DPD

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

Trade name : RIMON 10 EC
 Chemical formula : Novaluron : C₁₇H₉ClF₈N₂O₄ ; 1-[3-chloro-4-(1,1,2-trifluoro-2-trifluoro-methoxyethoxy)phenyl]-3-(2,6-difluorobenzoyl)urea

Use : Insecticide
 Company identification : Makhteshim Chemical Works Ltd. PO Box 60 Beer Sheva 84100 Israel. Fax : +972-8-6296848

Emergency phone nr : 972-3-6106666 Subscription no. 36789 (Makhteshim)

2. COMPOSITION / INFORMATION ON INGREDIENTS

This product is considered to be hazardous and contains hazardous components.

Substance name	Value(s)	CAS No	EC No	Index No	Classification
Novaluron	: 100 g/l	116714-46-6			
N-methyl-2-pyrrolidone	: ca 450 g/l	000872-50-4	212-828-1	606-021-00-7	Xi; R36/38
Phosphate esters emulsifier	: 165 g/l				Xi; R36/38

3. HAZARDS IDENTIFICATION

Human Health Hazards : Irritating to eyes. May cause sensitization by skin contact. However, the field-use dilution (0.1% in distilled water) does not cause skin sensitization

Environmental hazard : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

First aid

Inhalation : Remove victim to fresh air. Consult a doctor in the event of any complaints.

Ingestion : Do not induce vomiting. Wash out mouth with plenty of water. Never give anything by mouth to an unconscious person. Consult a doctor in the event of any complaints.

Skin contact : Remove affected clothing and wash all exposed skin area with soap and water, followed by warm water rinse. Consult a doctor in the event of any complaints.

Eye contact : Wash off with plenty of water. (15 min.) If pain persists, consult an eye specialist.

Note to physician : No specific antidote known. Treat symptomatically and give supportive therapy. If ingested perform gastric lavage and administer activated charcoal.

5. FIRE-FIGHTING MEASURES

Extinguishing media : For small fire : dry chemical , carbon dioxide . For large fire: foam , water fog , water spray . **Special procedures** : Fight fires from a protected location . Dike fire control water for later disposal. **Special exposure hazards** : Thermal decomposition generates : carbon dioxide , carbon monoxide , nitrogen oxides , chlorides , fluorides . **Protection against fire** : Wear suitable protective clothing. Self-contained breathing apparatus.

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6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Use appropriate protection (see section 8).
- Environmental precautions** : Dispose of this material and its container at hazardous or special waste collection point. If the product has contaminated surface water, inform the appropriate authorities. Contaminated soil layers have to be dug out.
- After spillage and/or leakage** : In the event of minor spillage: Absorb in sand or other inert material . Use appropriate containment to avoid environmental contamination.
In the event of major spillage: Dike spills using absorbent or impervious materials such as sand or clay for later disposal. Collect and contain as much free liquid as possible. Do not empty into drains .

7. HANDLING AND STORAGE

- Handling** : Do not breathe vapour . Avoid contact with skin and eyes .
- Storage** : Keep locked up. Keep container tightly closed. Keep only in the original container in a cool, well ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Industrial hygiene** : Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower . Wash hands thoroughly after handling. Wash clothing before re-using.
- Occupational Exposure Limits**
- TLV-TWA [mg/m3]** : (USA) Novaluron : Not established
(USA) N-Methyl-2-pyrrolidone : Not established
- **Respiratory protection** : During spraying wear suitable respiratory equipment.
 - **Skin protection** : Wear suitable protective clothing & chemical resistant boots .
 - **Hand protection** : Wear suitable gloves.
 - **Eye protection** : Chemical goggles or safety glasses.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state** : Liquid
- Colour** : light yellow
- Odour** : Faint characteristic
- Specific gravity** : 1.07
- Molecular weight** : Novaluron : 492.77
- Melting point [°C]** : Novaluron : 176.5 - 178°C (Pure)
- Vapour pressure** : Novaluron : 1.6x(10)⁻⁵ Pa at a temperature of 25°C (Pure)
- Solubility in water** : Emulsifiable
Novaluron : 3 µg/l at a temperature of 25°C
- Flash point [°C]** : 102°C (Closed cup)
- Log P octanol** : Novaluron : 4.3

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10. STABILITY AND REACTIVITY

Physico-chemical stability	: Stable under normal conditions.
Hazardous decomposition products	: Thermal decomposition generates : carbon dioxide , carbon monoxide , nitrogen oxides , chlorides , fluorides .
Hazardous reactions	: Hazardous polymerization will not occur .
Materials to avoid	: Avoid contact with : strong acids , strong bases .
Conditions to avoid	: Protect from (sun)light , open flame and sources of heat .

11. TOXICOLOGICAL INFORMATION

Rat oral LD50 [mg/kg]	: > 5000
Rat dermal LD50 [mg/kg]	: > 2000
Rat inhalation LC50 [mg/l/4h]	: Novaluron Tech: > 5.15
Dermal irritation (rabbit)	: Slight skin irritant.
Eyes irritation (rabbit)	: Irritating to eyes.
Sensitization	: Guinea pig maximization test: Sensitizer . However, the field-use dilution (0.1% in distilled water) does not cause skin sensitization
Carcinogenicity	: Not carcinogenic
Mutagenicity	: No evidence of genotoxicity
Reproductive toxicity	: Not teratogenic in animal experiments

12. ECOLOGICAL INFORMATION

96 H-LC50 - Rainbow trout [mg/l]	: 62.4
48 H-EC50 - Daphnia magna [µg/l]	: 4.22
48 H-NOEC - Daphnia magna [µg/l]	: 1.25
72 H-EbC50 - Algae [mg/l]	: 33.5
72 H-ErC50 - Algae [mg/l]	: 87.2
LD50 Birds [mg/kg]	: > 2000
Persistence and degradability	: Novaluron : Half-life time (t1/2) : 68-76 days , soil

13. DISPOSAL CONSIDERATIONS

Disposal : Dispose in a safe manner in accordance with local/national regulations.

14. TRANSPORT INFORMATION

- UN No.	: 3082
- Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (100 g/l Novaluron)
- Packing group	: III
- Class	: 9
- H.I. nr :	: 90
- ADR/RID	
- ADR class	: 9
- ADR Packing group	: III
- ADR Symbols	: Label 9 : Miscellaneous dangerous substances and articles.

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15. REGULATORY INFORMATION

EU Classification : This product is provisionally labelled by the supplier in accordance to the EU regulations;

Symbol(s)

: Xi: Irritant
N: Dangerous for the environment.

R Phrase(s)

: R36 - Irritating to eyes.
R43 - May cause sensitization by skin contact.
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S Phrase(s)

: S02 - Keep out of the reach of children.
S13 - Keep away from food, drink and animal feedingstuffs.
S20/21 - When using, do not eat, drink or smoke.
S24 - Avoid contact with skin.
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37 - Wear suitable gloves.
S61 - Avoid release to the environment. Refer to special instructions/Safety data sheets.

16. OTHER INFORMATION

Recommended uses and restrictions : None.

Text of R-phrases in heading 2 : R36/38 - Irritating to eyes and skin.

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