



MAKHTESHIM
CHEMICAL WORKS LTD.

MATERIAL SAFETY DATA SHEET

Page : 1 of 4

Revised edition no : 3

Date : 18/11/2004

Supersedes : 8/4/2002

ARDENT 50 SC

R-10795.G

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

Trade name : ARDENT 50 SC
Chemical formula : C18H19NO4
Use : Fungicide
Company identification : Makhteshim Chemical Works Ltd.
PO Box 60
Beer Sheva 84100 Israel.
Fax : +972-8-6296848-(364)
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
Kresoxim-methyl (ISO)	500 g/l	143390-89-0	----	607-310-00-0	Carc. Cat. 3; R40 N; R50-53

3. HAZARDS IDENTIFICATION

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. If not breathing, give artificial respiration. Keep victim warm and at rest. If breathing is difficult, give oxygen. Seek medical advice.
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. .
Remove contaminated clothing and shoes.
Eye contact : Rinse immediately with plenty of water. 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 : water spray , water fog , foam .
Special procedures : Fight fires from a protected location . Dike fire control water for later disposal. .
Special exposure hazards : Thermal decomposition generates : carbon monoxide , carbon dioxide , nitrogen oxides .
Protection against fire : Wear proper protective equipment. Use self-contained breathing apparatus when in close proximity to fire.

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.
After spillage and/or leakage : Cover with sand or other inert material. Collect spilled material with shovel, place into a clean container and cover container loosely . Dispose of this material and its container at hazardous or special waste collection point

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7. HANDLING AND STORAGE

- Handling** : Do not breathe gas, fumes, vapour or spray. 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. Avoid temperatures above 50 °C .

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Industrial hygiene** : Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower . Ventilation required. Wash clothing before re-using. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
- Occupational Exposure Limits** : Not established
- Personal protection**
- **Skin protection** : Wear suitable protective clothing.
 - **Hand protection** : Wear suitable gloves.
 - **Eye protection** : Chemical goggles or safety glasses.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state** : Dense suspension
- Colour** : greyish
- Odour** : Characteristic odour
- pH value** : Neutral.
- Molecular weight** : 313.4
- Melting point [°C]** : 97 - 102 (Pure)
- Density** : 1.08 g/l
- Vapour pressure** : 2.3 µPa (20°C)
- Solubility in water** : 2 mg/l
- Flash point [°C]** : Not applicable
- Explosion limits** : Not explosive

10. STABILITY AND REACTIVITY

- Physico-chemical stability** : Stable under normal dry conditions.
- Hazardous decomposition products** : Thermal decomposition generates : carbon monoxide , carbon dioxide , nitrogen oxides .
- Hazardous reactions** : Avoid contact with : strong bases , oxidizing agents .
- Hazardous Polymerization** : Will not occur.
- Conditions to avoid** : Protect from (sun)light , open flame , sources of heat . Decomposes upon heating.

11. TOXICOLOGICAL INFORMATION

- Rat oral LD50 [mg/kg]** : > 2000
- Rat dermal LD50 [mg/kg]** : > 2000
- Rat inhalation LC50 [mg/kg]** : Not applicable
- Rat inhalation LC50 [mg/l/4h]** : Kresoxim methyl Technical: > 5.6
- Dermal irritation (rabbit)** : Not irritant
- Eyes irritation (rabbit)** : Not irritant
- Sensitization** : Guinea pig maximization test: Non sensitizer



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12. ECOLOGICAL INFORMATION

96 H-LC50 - Rainbow trout [mg/l]	: 0.6
96 H-LC50 - Carp [mg/l]	: 1.15
48 H-LC50 - Daphnia magna [mg/l]	: 0.2
72 H-EC50 Algae [mg/l]	: 0.23
LD50 - Japanese quail [mg/kg]	: > 2000
Bees LD50 [μ g/Bee]	: >100 (oral , contact)

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. (500 g/l Kresoxim-methyl)
- 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.

15. REGULATORY INFORMATION

EU Classification : This product is provisionally labelled by the supplier in accordance with the suppliers understanding of the EU regulations :

Symbol(s)



: N: Dangerous for the environment.

R Phrase(s) : R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S Phrase(s) : S57 - Use appropriate container to avoid environmental contamination.
S60 - This material and its container must be disposed of as hazardous waste.

16. OTHER INFORMATION

Text of R-phrases in heading 2 : R40 - Limited evidence of a carcinogenic effect.
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Further information : None.

Print date : 18/11/2004

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2. COMPOSITION / INFORMATION ON INGREDIENTS (continued)

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