

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Barclay Dimethosect.
Chemical Name: O,O-dimethyl S-methylcarbamoylmethyl phosphorodithioate. (IUPAC).
Synonyms: Dimethoate
Group Name: Organophosphorus
Formula: C₅ H₁₂ NO₃ PS₂
Approved Use: Agricultural Insecticide.
Supplier: Barclay Chemicals Manufacturing Ltd.,
 Damastown Way
 Damastown Industrial Park
 Mulhuddart
 Dublin 15
Telephone No: 01-811 2900
Fax No: 01-822 4678
Issued By: Barclay Chemicals Ltd.

EMERGENCY TELEPHONE NUMBER: 00-353-1-8112900 (9am to 5pm)
00-353-863857769 (5pm to 9am)

2. COMPOSITION/INFORMATION ON INGREDIENTS

No.	Name
1.	Dimethoate
2.	Cyclohexanone, Xylene, Emulsifier.

No.	CAS No.	EC No.	R Phrases	Concentration	Classification
1.	60-51-5	200-480-3	R21/22	40g/l	Xn
2.	-	-	-	to 1 litre	Xn

Legend: Tx = Very Toxic, C = Corrosive, Xn = Harmful, Xi = Irritant, Ik = No Classification Required, E = Explosive,
 O = Oxidising, Fx = Extremely Flammable, F = Very Flammable, Fo = Flammable, N = Dang. To the
 Environment, M = Genotoxic, A = Sensitizing, K = Carcinogenic, R = Causes birth defects, H = skin absorption

3. HAZARDS IDENTIFICATION

Human

Harmful if swallowed.
 Irritating to eyes and skin.
 May cause sensitisation by skin contact.
 Flammable.

4. FIRST-AID MEASURES

General:	Call a doctor, clinic or hospital immediately. Explain that the victim has been exposed to Dimethoate -an organphosphorus insecticide and describe his or her condition. Move the exposed person from the area of contamination immediately.
Inhalation:	If breathing stops, start artificial respiration. Maintain until a doctor arrives.
Skin Contact:	After contact with skin, wash immediately with plenty of water and remove all contaminated clothing and shoes. Seek medical attention immediately.
Eye Contact:	Flush eye(s) immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes immediately and seek medical advice. Seek medical help immediately.
Ingestion:	If the exposed person is conscious have him/her drink plenty of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention and bring to nearest accident and emergency department. Make the exposed person lie down and keep him/her steady
Medical Information:	NOTE: Dimethoate is a cholinesterase inhibitor affecting the central and peripheral nervous systems and producing cardiac and respiratory depression. ANTIDOTE: -To be administered by accident and emergency staff: VERY CLOSE ATTENTION MUST BE PAID TO PATIENT FOR AT LEAST 48 HOURS. For specialist advice doctors should contact the nearest Poisons Information Centre.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:	Dry powder or carbon dioxide (CO ₂) for small fires, water spray or foam for large fires. Dike area to prevent water run off
Unsuitable Extinguishing Media:	Avoid heavy hose streams.
Special Exposure Hazards:	Fire may cause dimethyl sulphide, sulphur dioxide, carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen fluoride and phosphorus pentoxide to evolve.
Protective Equipment:	Fire fighters should wear full breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Observe all protection and safety precautions when cleaning up spills Suitable clothing, goggles or glasses with side-shields, gloves.
Environmental Precautions:	Contain spillage. Avoid contamination of surface waters. Inform the local authority or national rivers authority if spillage enters drains or rivers
Methods for Cleaning Up:	Large liquid spills on the floor or other impervious materials should be contained or diked and then absorbed with an inert material such as hydrated lime, sawdust, and or fullers earth or other absorbent material. Collect contaminated material and put in metal drums. Large spills that soak up into the ground should be dug up, placed in metal drums and disposed of in accordance with instructions provided under disposal. Rinse area well with soda dye.

7. HANDLING AND STORAGE

Handling:	Full protective clothing may be required. Wash hands and exposed skin after work. Do not drink, eat or smoke when handling the concentrate or spray. Keep out of reach of children . Follow precautions on the label.
Storage:	Product is stable at temperatures below 25 °C. NOTE: The product should never be heated above 35 °C and local heating above this temperature should be avoided.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Precautions:	Wear suitable protective gloves and face protection when handling concentrate. Wash all protective clothing thoroughly after use, especially insides of gloves. When using do not eat, drink or smoke. Wash splashes from skin or eyes immediately Do not breathe spray. Keep away from animal feedstuffs. Wash hands before meals and immediately after work Keep out of reach of children
Protective Clothing:	<i>Respiratory Protection:</i> In case of insufficient ventilation wear a pesticide respirator approved by the local authorities when dealing with the concentrate or spray. <i>Eye Protection</i> Safety glasses should be worn when dealing with the concentrate or spray. <i>Hand Protection</i> Chemical resistant gloves such as nitrile rubber should be worn when dealing with the concentrate or spray. <i>Skin Protection</i> Water proof pants, coat and hat, rubber boots, or rubber overshoes should be worn when dealing with the concentrate or spray.
Occupational Exposure Limits:	None known

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Amber liquid
Odour:	Mercaptanic/acetone-peppermint odour
pH:	7.0
Boiling Point/Boiling Range:	No data
Melting Point/Melting Range:	< 5 °C
Flash Point:	41°C
Flammability:	Flammable
Explosive Properties:	None.
Oxidizing Properties:	No information.
Vapour Pressure:	No information
Relative Density:	1.051 at 20 °C
Solubility (water and fat):	Emulsifiable in water.

10. STABILITY AND REACTIVITY

Conditions to Avoid:	The product (Dimethoate) will decompose rapidly when heated to temperatures above 80 °C significantly increasing the risk of inducing explosion. The decomposition is to a significant extent dependent on time. As well as temperature due to exothermic and autocatalytic reactions. The reactions involve rearrangements and polymerisation releasing volatile odours and inflammable compounds such as dimethyl sulphide and methyl mercaptane.
Materials to Avoid:	No information.
Hazardous Decomposition Products:	The product decomposes in the case of fire to dimethyl sulfide, sulfur dioxide, carbon monoxide, carbon dioxide, nitrogenoxides, hydrogen fluoride and phosphorus pentoxide.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:	Oral toxicity: LD ₅₀ Rat: 400-500 mg/Kg Dermal toxicity: LD ₅₀ Rat: > 2000 mg/Kg Inhalation toxicity: LD ₅₀ Rat Approx. 3mg/Kg/ (1-4h)
Irritation:	Irritating to skin and eyes.
Sensitization:	May cause sensitisation by skin contact.

12. ECOLOGICAL INFORMATION

Mobility:	K _{OC} ranges from 16.25 to 51.88
Degradability:	The active ingredient is biodegradable and undergoes rapid degradation in the environment and without problems in sewage treatment plants. The product is toxic to wildlife and to other invertebrates.
Accumulation:	DT ₅₀ 2-41 days

13. DISPOSAL CONSIDERATIONS

Product and Waste:	Spill and waste disposal procedures approved by state and local authorities must be observed.
Containers:	Do not contaminate ponds, food or feed by storage and disposal. Triple rinse and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill. Procedures approved by the state and local authorities must, however be observed.

14. TRANSPORT INFORMATION

1 Litre

Special Transport Precautions:	UN No 3017. Class 6.1. Packing group III
Road/Rail Classification:	--
IMDG Classification:	Dangerous goods in limited quantities of Class 6.1. Marine Pollutant.
Air Classification:	(contains dimethoate 40% w/w). Marine pollutant.

15. REGULATORY INFORMATION

Contains Dimethoate 400g/l, Cyclohexanone and Xylene.

R- PHRASES

- R10** - Flammable.
- R22** - Harmful if swallowed.
- R36/38** - Irritating to eyes and skin.
- R43** - May cause sensitisation by skin contact

S- PHRASES

- S25** - Avoid contact with eyes.
 - S26/28** - Wash concentrate from skin or eyes immediately and seek medical advice.
 - S36** - Wear suitable protective clothing.
 - S37** - Wear suitable gloves.
 - S49** - Store in original container.
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16. OTHER INFORMATION

Revision 0	Revision Date: 05.04.97	
Revision 1	Revision Date: 10.05.98	
Revision 2	Revision Date: 25.09.98	
Revision 3	Revision Date: 06.11.00	
Revision 4	Revision Date: 24.06.02	
Revision 5	Revision Date: 09.02.04	Update to comply with 2001/58/EC, change tel. no.
Revision 6	Revision Date: 26.07.04	Supplier details correction
Revision 7	Revision Date: 11.12.06	Emergency phone number updated

DISCLAIMER

The information in the MSDS relates to this specific material. If the product is used as a component in any other product, this MSDS may not be valid. The information contained was obtained from sources which we believe are reliable. The information is provided without any warranty, expressed or implied, regarding its correctness. This Material Safety Data Sheet was prepared according to Directive 2001/58/EC.
