



SUPRATHION EC

R-22762

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

Trade name : SUPRATHION EC
Chemical formula : Methidathion : C₆H₁₁N₂O₄PS₃
Chemical description : Methidathion : S-2,3-dihydro-5-methoxy-2-oxo-1,3,4-thiadiazol-3-ylmethyl O,O-dimethyl phosphorodithioate
Use : Insecticide
Company identification : Makhteshim Chemical Works Ltd.
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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
Methidathion (ISO)	: 420 g/l	950-37-8	213-449-4	015-069-00-2	T+; R28 Xn; R21 N; R50-53
Xylene	: ca 45 %	1330-20-7	215-535-7	601-022-00-9	R10 Xn; R20/21 Xi; R38
gamma-Butyrolactone	: > 8 %	96-48-0	-	-	Xn; R22 Xi; R36
CaDBS/n-Butanol	: 2 to 5 %	----	----	----	R10 Xn; R22 Xi; R37/38-41

3. HAZARDS IDENTIFICATION

Main hazards : THIS COMPOUND INHIBITS CHOLINESTERASE.
Physical/Chemical Hazards : Flammable.
Human health hazards : Harmful in contact with skin .
Toxic by inhalation and if swallowed.
Irritating to skin.
Risk of serious damage to eyes.
Environmental hazard : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

Effects and symptoms : Exposure may result in excessive sweating , weakness , salivation , nausea , bradycardia , tachycardia , bronchorrhoea , cough , bronchospasm , lung oedema , small pupils , central nervous depression , fasciculation and convulsions , headache , faintness and giddiness .
Inhalation : May result in systemic poisoning.
Ingestion : May result in systemic poisoning.
Skin contact : May result in systemic poisoning.
Eye contact : tears . Redness ,
First aid
Inhalation : Remove victim to fresh air. Keep victim warm and at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Immediately get medical attention.
Ingestion : Do not induce vomiting. Wash out mouth with plenty of water. Never give anything

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4. FIRST AID MEASURES (continued)

- by mouth to an unconscious person. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Immediately get medical attention.
- Skin contact** : Remove affected clothing and wash all exposed skin area with soap and water, followed by warm water rinse. Obtain medical attention.
- Eye contact** : In case of eye contact, immediately rinse with clean water for 10-15 minutes. Immediately consult an eye specialist.
- Note to physician** : Antidote 1 : Atropine sulfate .
Antidote 2 : Obidoxime chloride or Pralidoxime (PAM).
Suggest serum and/or RBC cholinesterase determination.
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, , or alcohol resistant foam .
- Special procedures** : Fight fires from a protected location . Dike fire control water for later disposal.
Keep container cool by spraying with water .
- Special exposure hazards** : Thermal decomposition generates : carbon dioxide , carbon monoxide , nitrogen oxides , sulfur oxide , phosphorus oxides .
- Protection against fire** : Wear suitable protective clothing . Self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Use appropriate protection (see section 8). During cleaning activity, shut off ignition sources .
- Environmental precautions** : Dispose of this material and its container at hazardous or special waste collection point, , In accordance with national and regional regulations . 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 container to avoid environmental contamination.
In the event of major spillage: Collect and contain as much free liquid as possible.
Dike spills using absorbent or impervious materials such as sand or clay for later disposal.

7. HANDLING AND STORAGE

- Handling** : Do not breathe fumes. 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.
Keep container dry . Keep away from strong bases .
Keep away from sources of ignition - No smoking .
- Packing** : Multi-layer high density polyethylene extrusion blow containers .
Resin-lined metal drums .

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Industrial hygiene** : Ventilation required. 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.
- Personal protection**
- Respiratory protection : During spraying wear suitable respiratory equipment.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION (continued)

- Skin protection : Wear protective clothing .
- Hand protection : Wear suitable gloves.
- Eye protection : Chemical goggles or face shield.
- TLV-TWA [mg/m3] : (USA) Methidathion : Not established
(USA) Xylene : 434 , A4 (1996)

9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state : Liquid
- Colour : Blue.
- Odour : Faint characteristic
- Specific gravity : 1.06 - 1.07 at a temperature of 20°C
- Molecular weight : Methidathion : 302.33
- Melting point [°C] : Methidathion : 39 - 40 (Pure)
- Vapour pressure : Methidathion : 186 mPa at a temperature of 20°C
- Solubility in water : Emulsifiable
Methidathion : 240 mg/l at a temperature of 20°C
- Flash point [°C] : > 24°C (Closed cup)
- Explosion limits - lower [%] : Xylene : 1%
- Explosion limits - upper [%] : Xylene : 7%

10. STABILITY AND REACTIVITY

- Physico-chemical stability : Stable under normal conditions.
- Hazardous decomposition products : Thermal decomposition may generate : carbon dioxide , carbon monoxide , nitrogen oxides , sulfur oxide , phosphorus oxides .
- Hazardous reactions : Hazardous polymerization will not occur .
- Materials to avoid : Avoid contact with : Strong oxidizing agents , strong acids , strong bases .
- Conditions to avoid : Protect from (sun)light and excessive heat . Avoid temperatures above : 75°C

11. TOXICOLOGICAL INFORMATION

- Rat oral LD50 [mg/kg] : 61
- Rat dermal LD50 [mg/kg] : 893
- Rat inhalation LC50 [mg/l/4h] : Suprathion technical: > 0.228
- Dermal irritation (rabbit) : Severely irritating
- Eyes irritation (rabbit) : Corrosive to eyes.
- Sensitization : Guinea pig maximization test: Non sensitizer
- Carcinogenicity : Methidathion : Not carcinogenic
- Mutagenicity : Methidathion : Not mutagenic.
- Reproductive toxicity : Methidathion : Not teratogenic in animal experiments

12. ECOLOGICAL INFORMATION

- Ecological effects information : The data below are for Methidathion:
- 96 H-LC50 - Rainbow trout [mg/l] : 0.01
- EC50 Algae [mg/l] : 22
- LD50 Birds [mg/kg] : 80

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12. ECOLOGICAL INFORMATION (continued)

Persistence and degradability : Half-life time (t1/2) 9 - 10 days (soil)
Half-life time (t1/2) 30 days (water)

Mobility : Low mobility (soil)

Bioaccumulative potential : BCF = 18 (24 - 168 hours)

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

- **UN No.** : 3017

- **Proper shipping name** : ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FLAMMABLE (420 g/l Methidathion, 45% Xylene)

- **Packing group** : II

- **Class** : 6.1

- **H.I. nr :** : 63

- **IMDG-Marine pollution** : YES

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)



R Phrase(s)

: T: Toxic
N: Dangerous for the environment.

: R10 - Flammable.
R21 - Harmful in contact with skin.
R23/25 - Toxic by inhalation and if swallowed.
R38 - Irritating to skin.
R41 - Risk of serious damage to eyes.
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.
S23 - Do not breathe gas/fumes/vapour/spray.
S24/25 - Avoid contact with skin and eyes.
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible).
S61 - Avoid release to the environment. Refer to special instructions/Safety data sheets.



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MATERIAL SAFETY DATA SHEET

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16. OTHER INFORMATION

Recommended uses and restrictions : None.

Text of R-phrases in heading 2

: R10 - Flammable.

R20/21 - Harmful by inhalation and in contact with skin.

R21 - Harmful in contact with skin.

R22 - Harmful if swallowed.

R28 - Very toxic if swallowed.

R36 - Irritating to eyes.

R37/38 - Irritating to respiratory system and skin.

R38 - Irritating to skin.

R41 - Risk of serious damage to eyes.

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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