

SUPRATHION EC

SECTION 1. Identification of the substance/mixture and of the company/undertaking

Trade name : SUPRATHION EC
Substance name : Methidathion : S-2,3-dihydro-5-methoxy-2-oxo-1,3,4-thiadiazol-3-ylmethyl O,O-dimethyl phosphorodithioate
Product code : R-22762-SO
Chemical formula : Methidathion : C₆H₁₁N₂O₄PS₃
Relevant identified uses : Insecticide
Company identification : ADAMA SOUTH AFRICA (PTY) LTD
 Ground Floor, Simeka House
 The Vineyards Office Estate
 99 Jip de Jager Drive
 Bellville, 7530
Phone nr : +27 82 446 8946
 +27 86 155 5777
 +27 21 982 1460

SECTION 2. Hazards identification

Classification (Directive 67/548/EEC - 1999/45/EC) : 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.

SECTION 3. Composition/information on ingredients

Components		: This product is considered to be hazardous and contains hazardous components.					
Substance name	Concentration % w/w	CAS No	EC No	Index No	REACH Reg.	Classification	
Methidathion (ISO)	: 42 %	950-37-8	213-449-4	015-069-00-2	----	T+; R28 Xn; R21 N; R50-53	
Butyrolactone	: > 8 %	96-48-0	202-509-5	-----	01-2119471839-21-0000	Xn; R22 R67 Xi; R41	
CaDBS/n-Butanol	: 2 to 5 %	-----	-----	-----	----	R10 Xn; R22 Xi; R37/38-41	
Xylene	: ... 45 %	1330-20-7	215-535-7	601-022-00-9	----	R10 Xn; R20/21 Xi; R38	

SECTION 4. First aid measures

First aid measures

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.
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.

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Ingestion	: Do not induce vomiting. Wash out mouth with plenty of water. Never give anything by mouth to an unconscious person. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Immediately get medical attention.
Ingestion	: May result in systemic poisoning.
Eye contact	: tears . Redness ,
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.

SECTION 5. Fire-fighting measures

Suitable extinguishing media	: For small fire : dry chemical , carbon dioxide . For large fire: water spray , or alcohol resistant foam .
Specific 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.
Special procedures	: Fight fires from a protected location . Dike fire control water for later disposal. Keep container cool by spraying with water .

SECTION 6. Accidental release measures

For emergency responders	: 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.
Clean up methods	: 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.

SECTION 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 .

SECTION 8. Exposure controls/personal protection

TLV© -TWA [mg/m³]	: (USA) Methidathion : Not established (USA) Xylene : 434 , A4 (1996)
Exposure controls	: 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.
• Hand protection	: Wear suitable gloves.
• Skin protection	: Wear protective clothing .

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- **Eye protection** : Chemical goggles or face shield.

SECTION 9. Physical and chemical properties

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

SECTION 10. Stability and reactivity

Chemical stability	: Stable under normal conditions.
Hazardous decomposition products	: Thermal decomposition may generate : carbon dioxide , carbon monoxide , nitrogen oxides , sulfur oxide , phosphorus oxides .
Materials to avoid	: Avoid contact with : Strong oxidizing agents , strong acids , strong bases .
Conditions to avoid	: Protect from sunlight and excessive heat . Avoid temperatures above : 75°C

SECTION 11. Toxicological information

- Rat oral LD50 [mg/kg]	: 61
- Dermal, Rat 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
Mutagenicity	: Methidathion : Not mutagenic
Carcinogenicity	: Methidathion : Not carcinogenic
Toxic for reproduction : Fertility	: Methidathion : Not teratogenic in animal experiments

SECTION 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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Persistence - 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)

SECTION 13. Disposal considerations

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

SECTION 14. Transport information

UN N° : 3017

Proper shipping name : ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FLAMMABLE (42% Methidathion, 45% Xylene)

- H.I. no : 63

- IMO-IMDG - class or division : 6.1

- Packing group : II

- IMDG-Marine pollution : Marine pollutant - Polluant marin

SECTION 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)



: T: T : Toxic
N: N : Dangerous for the environment.

R Phrase(s)

: 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.

SECTION 16. Other information

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List of relevant R phrases (heading 3) : 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.
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.
R67 - Vapours may cause drowsiness and dizziness.

Recommended uses and restrictions : None.

SECTION 16. Other information (continued)

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