

# MATERIAL SAFETY DATA SHEET

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Revised edition no : 3

Date : 2 / 3 / 2009

Supersedes : 28 / 1 / 2009

## CLOMAZONE 480 EC

H-0089

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

**Trade name** : CLOMAZONE 480 EC  
**Chemical description** : Clomazone: 2[(2-chlorophenyl)methyl]-4,4-dimethyl-3-isoxazolidinone  
**Use** : Herbicide.  
**Company identification** : Makhteshim-Agan SA (Pty) Ltd P.O. Box 498 Brackenfell 7561 South Africa  
**Emergency phone nr** : +27-21-982-1460  
**Email** : info@makhro.com

### 2. HAZARDS IDENTIFICATION

**Human health hazards** : Flammable. Harmful if swallowed. Risk of serious damage to eyes.  
**Environmental hazard** : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance name	Value(s)	CAS No	EC No	Index No	Classification
Clomazone	46 - 50 %	81777-89-1	----	----	Xn; R20/22 N; R50-53
Calcium dodecylbenzene sulphonate	2 - 4 %	26264-06-2	247-557-8	----	Xi; R38-41
Solvent naphta light aromatic (low boiling point)	45 - 50 %	64742-95-6	265-199-0	649-356-00-4	Xn; R65

### 4. FIRST AID MEASURES

**First aid** : Remove victim from area of exposure. Wash off remaining material with plenty of water .  
**Inhalation** : Remove victim to fresh air. If breathing is difficult: artificial respiration .  
Get medical attention .  
**Ingestion** : Wash out mouth with plenty of water. Get medical attention . Never give anything by mouth to an unconscious person.  
**Skin contact** : Remove contaminated clothing . Wash away remainder with water and soap .  
**Eye contact** : Wash out with water with the eyelid held wide open for at least 15 minutes.  
Get medical attention .  
**Note to physician** : There is no specific antidote. Treat symptomatically and give supportive therapy.  
**Protection of first-aiders** : Use appropriate protection (see section 8).

### 5. FIRE-FIGHTING MEASURES

**Extinguishing media** : Dry chemical , water spray foam , carbon dioxide .  
**Special exposure hazards** : Flashback may occur along vapour trail.  
**Hazardous decomposition products** : Chloride compounds , and nitrogen oxides .  
**Protection of fire-fighters** : Self-contained breathing apparatus and total protection required in enclosed areas.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions** : Wear suitable protective clothing .  
**Environmental precautions** : Do not discharge into the environment.  
**After spillage and/or leakage** : Keep away from : open flame , sparks and heat . Absorb remainder in sand or other inert material. Dispose of this material and its container to hazardous or special waste collection point.

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### 7. HANDLING AND STORAGE

- Handling** : Avoid contact with skin and eyes .  
Ventilation required. Keep away from : sparks , open flame and direct sunlight
- Storage** : Keep only in the original container . Keep in a cool, dry, well ventilated place away from direct sunlight .

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Industrial hygiene** : Ventilation required.  
When using do not eat, drink or smoke. Wash hands thoroughly after handling.  
Wash clothing separately before re-use.
- Personal protection**
- **Respiratory protection** : Respiratory protection is not required if good ventilation is maintained
  - **Skin protection** : Wear suitable protective clothing and chemical resistant boots .
  - **Hand protection** : Chemical resistant gloves .
  - **Eye protection** : Chemical goggles or face shield.
- Occupational Exposure Limits** : Clomazone : Not established
- TLV** : Aromatic C-9 solvent (Naphta) : ( USA ) 25

### 9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state** : Liquid
- Colour** : Yellowish
- Odour** : Aromatic
- Density [g/ml]** : 1.12 ± 0.02 (20°C)
- Vapour pressure [mPa]** : 19.2( 25°C) (Clomazone)
- Solubility in water** : Miscible
- Flash point [°C]** : 48.5
- Auto-ignition temperature [°C]** : 400(Naphta)
- Log P octanol / water** : 2.5 (Clomazone)
- Flammability** : Flammable
- Explosion properties** : Not explosive
- Explosion limits - lower [%]** : 0.8 volume %
- Explosion limits - upper [%]** : 7 volume %
- Oxidation properties** : Not oxidizing
- Others** : Surface tension : 36mN/m( 22°C)

### 10. STABILITY AND REACTIVITY

- Stability** : Not subject to polymerization
- Hazardous decomposition products** : Chloride compounds , and nitrogen oxides .
- Materials to avoid** : Oxidizing agents , acids and alkali .

### 11. TOXICOLOGICAL INFORMATION

- On product** : **Clomazone 480 EC**
- Rat oral LD50 [mg/kg]** : 300-2000
- Rabbit dermal LD50 [mg/kg]** : >2000
- Rat inhalation LC50 [mg/l/4h]** : > 5.15 Maximum concentration attainable. ( Not adequate for classification )
- Dermal irritation (rabbit)** : Mildly irritating
- Eyes irritation (rabbit)** : Severely irritating

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## 11. TOXICOLOGICAL INFORMATION (continued)

<b>Sensitization</b>	: Non sensitizer
<b>Carcinogenicity</b>	: <b>Clomazone:</b> : EU : Not classified
<b>Mutagenicity</b>	: Clomazone: Not mutagenic
<b>Reproductive toxicity</b>	: No adverse health effects were noted.
<b>Teratogenicity</b>	: Not teratogenic in animal experiments

## 12. ECOLOGICAL INFORMATION

<b>On product</b>	
<b>96 H-LC50 - Rainbow trout [mg/l]</b>	: 19 (Clomazone)
<b>48 H-EC50 - Daphnia magna [mg/l]</b>	: 67.3
<b>72H- EC50 - Algae [mg/l]</b>	: 41.2
<b>LD50 Birds [mg/kg]</b>	: Clomazone: Bobwhite quail >2,150
<b>Bees LD50 [µg/Bee]</b>	: Not toxic to bees
<b>Persistence and degradability</b>	: <b>Clomazone: Soil :</b> : Half-life time (t1/2) : 24 day(s) : <b>Clomazone: Water</b> : : Degraded slowly by sunlight
<b>Mobility</b>	: <b>Clomazone Soil :</b> : Low mobility
<b>Bioaccumulative potential</b>	: Low bioaccumulation potential in aquatic organisms .

## 13. DISPOSAL CONSIDERATIONS

<b>Disposal</b>	: Dispose of in a pesticide approved landfill, or in a chemical incinerator equipped with scrubbers. In accordance with national and regional regulations
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## 14. TRANSPORT INFORMATION

- UN No.	: 1993
- Proper shipping name	: UN1993 FLAMMABLE LIQUID, N.O.S.(Naphta), 3, III
- Packing group	: III
- Class	: 3
- H.I. nr :	: 30
- IMDG-Marine pollution	: YES

## 15. REGULATORY INFORMATION

<b>EU Classification</b>	: Classification and labeling have been performed according to EU directives 67/548/EEC, 88/379/EEC including amendments and the intended use.
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Symbol(s)



R Phrase(s)

	: Xn : Harmful. N: Dangerous for the environment.
	: R10 - Flammable. R22 - Harmful if swallowed. R41- Risk of serious damage to eyes.

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## 15. REGULATORY INFORMATION (continued)

**S Phrase(s)**

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S02 - Keep out of the reach of children.

S13 - Keep away from food, drink and animal feedingstuffs.

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.

S29/35- Do not empty into drains; dispose of this material and its container in a safe way.

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

S46- If swallowed, seek medical advice immediately and show this container or label.

S57 - Use appropriate container to avoid environmental contamination.

S61 - Avoid release to the environment. Refer to special instructions/Safety data sheets.

## 16. OTHER INFORMATION

**Text of R-phrases in heading 3 :** :

R38 - Irritating to skin.  
R41 - Risk of serious damage to eyes.  
R65 - Harmful : may cause lung damage if swallowed.

**Further information** : None.**Print date** : 8 / 7 / 2009

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