

SAFETY DATA SHEET
EU Regulation No. 1907/2006,
Annex II

Page : 1

Revised edition no : 2

Date : 25 / 6 / 2014

Supersedes : 29 / 3 / 2012

KALIF 480 EC

H-0089-11043-RAII

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

1.1. Product identifier

Trade name : KALIF 480 EC

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses : Herbicide

Uses advised against : None under normal conditions.

1.3. Details of the supplier of the safety data sheet

: ADAMA SOUTH AFRICA (PTY) LTD
21 Viben Street
Brackenfell 7560

Email : msds@mcw.co.il

1.4. Emergency telephone number

: +27 82 331 6463
+27 21 982 1460

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

Classification 67/548/EEC (DSD) - 1999/45/EC (DPD)

: R10
Xn; R22-R65
Xi; R41
R52-53

2.2. Label elements

Labelling 1999/45/EC (DPD)

Symbol(s)



R Phrase(s)

: Xn : Harmful.
: R10 - Flammable.
R22 - Harmful if swallowed.
R41 - Risk of serious damage to eyes.
R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65 - Harmful : may cause lung damage if swallowed.

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.
S25 - Avoid contact with eyes.
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37 - Wear suitable gloves.
S57 - Use appropriate container to avoid environmental contamination.
S62 - If swallowed, do not induce vomiting : seek medical advice immediately and show this container or label.

2.3. Other hazards

Other hazards : None under normal conditions.

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SECTION 3. Composition/information on ingredients

Substance name	Concentration % w/w	CAS No	EC No	Index No	REACH Reg.	Classification
Clomazone	: 46 - 50 %	81777-89-1	-----	-----	----	Xn; R22 R52-53 ----- Acute Tox. 4 - H302 Aquatic Chronic 3 - H412
Calcium dodecylbenzene sulphonate	: 2 - 4 %	26264-06-2	247-557-8	-----	----	Xi; R38-41 ----- Eye Dam 1 - H318 Skin Irrit. 2 - H315
Solvent naphta light aromatic	: 45 - 50 %	64742-95-6	265-199-0	649-356-00-4	----	Xn; R65 ----- Asp. Tox 1 - H304

SECTION 4. First aid measures

4.1. Description of first aid measures

- First aid measures** : 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 .
- Skin contact** : Remove contaminated clothing . Wash away remainder with water and soap .
- Eye contact** : for at least 15 minutes.
Wash out with water with the eyelid held wide open
Get medical attention .
- Ingestion** : Wash out mouth with plenty of water. Get medical attention . Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed

4.3. Indication of any immediate medical attention and special treatment needed

- Note to physician** : There is no specific antidote. Treat symptomatically and give supportive therapy.
- Protection of first-aiders** : Use appropriate protection (see section 8).

SECTION 5. Fire-fighting measures

5.1. Extinguishing media

- Suitable extinguishing media** : Dry chemical , water spray foam , carbon dioxide .

5.2. Special hazards arising from the substance or mixture

- Specific hazards** : Flashback may occur along vapour trail.
- Hazardous decomposition products** : Chloride compounds , and nitrogen oxides .

5.3. Advice for fire-fighters

- Protection against fire** : Self-contained breathing apparatus and total protection required in enclosed areas.

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- For emergency responders** : Wear suitable protective clothing .

6.2. Environmental precautions

- Environmental precautions** : Do not discharge into the environment.

6.3. Methods and material for containment and cleaning up

- Clean up methods** : 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.

6.4. Reference to other sections

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SECTION 7. Handling and storage

7.1. Precautions for safe handling

Handling : Avoid contact with skin and eyes .
Ventilation required. Keep away from : sparks , open flame and direct sunlight

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep only in the original container . Keep in a cool, dry, well ventilated place away from direct sunlight .

7.3. Specific end use(s)

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

TLV© : Aromatic C-9 solvent : 19

8.2. Exposure controls

Clomazone : Not established

: 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
- **Hand protection** : Chemical resistant gloves .
- **Skin protection** : Wear suitable protective clothing and chemical resistant boots .
- **Eye protection** : Chemical goggles or face shield.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state at 20 °C : Liquid
Colour : Yellowish
Odour : Aromatic
Odour threshold : Not available
pH : 4-6
Melting point / Freezing point : Melting point: 32°C (Clomazone)
Initial boiling point - boiling range : Not available
Flash point : 48.5
Evaporation rate : Not available
Flammability : Flammable.
Explosion limits (lower - upper) : 0.8 - 7 volume % (solvent)
Vapour pressure : 2.6x10⁻⁴ hPa (25°C) (Clomazone)
Vapour density : Not available
Relative density : 1.020 (20°C)
Solubility : Emulsion
Water: 1.4 g/l (20°C, pH 7) (Clomazone)
Partition coefficient : n-octanol / water : 2.5 (pH 7) (Clomazone)
Auto-ignition temperature : 400°C
Decomposition temperature : 390°C (Clomazone)
Viscosity : 26 s (40°C°) (3 mm ISO cup)
Oxidising properties : Not oxidizing

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SECTION 9. Physical and chemical properties (continued)

9.2. Other information

: Surface tension : 29.9mN/m(22°C)

SECTION 10. Stability and reactivity

10.1. Reactivity

: Stable under normal conditions.

10.2. Chemical stability

10.3. Possibility of hazardous reactions

: Hazardous polymerization will not occur

10.4. Conditions to avoid

: High temperature. ,
Sources of ignition. ,

10.5. Incompatible materials

Materials to avoid : Oxidizing agents , acids and alkali .

10.6. Hazardous decomposition products

Hazardous decomposition products : Chloride compounds , and nitrogen oxides .

SECTION 11. Toxicological information

On product

11.1. Information on toxicological effects

- Acute toxicity
 - Oral, Rat LD50 (mg/kg) : 300-2000
 - Dermal, Rat LD50 [mg/kg] : > 2000
 - Inhalation, Rat LC50 [mg/l/4h] : > 5.15 Maximum concentration attainable
- Skin corrosion/irritation : Not irritant
- Serious eye damage/irritation : Severely irritating
- Respiratory or skin sensitisation : Non sensitizer
- Germ cell mutagenicity : Not mutagenic
- Carcinogenicity : Not carcinogenic
- Reproductive toxicity : Not considered to be toxic for the reproductive system.
- STOT-single exposure : Not available
- STOT-repeated exposure : Not available
- Aspiration hazard : R65 (solvent)

SECTION 12. Ecological information

12.1. Toxicity

Acute toxicity

- 96 H-LC50 - Rainbow trout [mg/l] : 24.5
- 48 H-EC50 - Daphnia magna [mg/l] : 67.3
- 72 H-EC50 - Algae [mg/l] : 41.2
- Bees LD50 [µg] : Not toxic to bees

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SECTION 12. Ecological information (continued)

LD50 Birds [mg/kg] : Bobwhite quail > 2,000

12.2. Persistence - degradability

Persistence - degradability : Soil :
Half-life time (t1/2) : 15-90 day(s)
Water : Degraded slowly by sunlight

12.3. Bioaccumulative potential

Bioaccumulative potential : Low bioaccumulation potential in aquatic organisms .

12.4. Mobility in soil

Mobility : Soil : Low mobility

12.5. Results of PBT and vPvB assessment

: Not available

12.6. Other adverse effects

: None known.

SECTION 13. Disposal considerations

13.1. Waste treatment methods

General : Dispose of in a pesticide approved landfill, or in a chemical incinerator equipped with scrubbers. In accordance with national and regional regulations

SECTION 14. Transport information

14.1. UN number

UN N° : 1993

Hazard Label(s)



: 3 : Flammable liquid.

14.2. UN proper shipping name

• Land transport - ADR/RID : UN1993 FLAMMABLE LIQUID, N.O.S.(Naphta), 3, III
Proper shipping name : UN1993 FLAMMABLE LIQUID, N.O.S.(Naphta), 3, III
- H.I. no : 30
• Sea transport - IMO-IMDG : UN1993 FLAMMABLE LIQUID, N.O.S.(Naphta), 3, III
• Air transport - ICAO/IATA : UN1993 FLAMMABLE LIQUID, N.O.S.(Naphta), 3, III

14.3. Transport hazard class(es)

• Land transport - ADR/RID : 3
• Sea transport - IMO-IMDG : 3
- IMO-IMDG - class or division : 3
• Air transport - ICAO/IATA : 3

14.4. Packing group

• Land transport - ADR/RID : III
- Packing group : III
• Sea transport - IMO-IMDG : III
• Air transport - ICAO/IATA : III

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SECTION 14. Transport information (continued)

14.5. Environmental hazards

- IMDG-Marine pollution : Marine pollutant - Polluant marin

14.6. Special precautions for user

: See transport documents.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

: Not applicable.

SECTION 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

: Ensure all national/local regulations are observed.

15.2. Chemical Safety Assessment

: Not applicable

SECTION 16. Other information

List of relevant R phrases (heading 3) : R22 - Harmful if swallowed.
R38 - Irritating to skin.
R41 - Risk of serious damage to eyes.
R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65 - Harmful : may cause lung damage if swallowed.

List of relevant H phrases (Section 3) : H302 - Harmful if swallowed.
H304 - May be fatal if swallowed and enters airways.
H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H412 - Harmful to aquatic life with long lasting effects.

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Further information : None.

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