

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

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Revised edition no : 2

Date : 25 / 6 / 2014

Supersedes : 25 / 7 / 2012

BROMOTRIL

H-0125-07817-RAII

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

1.1. Product identifier

Trade name : BROMOTRIL

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)

: Repr. Cat. 3; R63
Xn; R20/22-R65
Xi; R38
N; R50-53

2.2. Label elements

Labelling 1999/45/EC (DPD)

Symbol(s)



R Phrase(s)

: N : Dangerous for the environment.
Xn : Harmful.
: R20/22 - Harmful by inhalation and if swallowed.
R38 - Irritating to skin.
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R63 - Possible risk of harm to the unborn child.
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.
S23 - Do not breathe gas/fumes/vapour/spray.
S36/37 - Wear suitable protective clothing and gloves.
S60 - This material and its container must be disposed of as hazardous waste.
S61 - Avoid release to the environment. Refer to special instructions/Safety data sheets.

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
Bromoxynil octanoate	: 30 - 33 %	1689-99-2	216-885-3	608-017-00-0	----	Repr. Cat. 3; R63 T; R23 Xn; R22 R43 N; R50-53 (M fact. = 10) ----- Acute Tox. 3 - H331 Acute Tox. 4 - H302 Repr. 2 - H361d Skin Sens. 1 - H317 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410
Ethylhexylique (2-) Alcool	: 1 - 2 %	104-76-7	203-234-3	-----	----	Xi; R36/38 ----- Eye irrit 2 - H319 Skin Irrit. 2 - H315
Calcium dodecylbenzene sulphonate	: 2 - 3 %	26264-06-2	247-557-8	-----	----	Xi; R38-41 ----- Eye Dam 1 - H318 Skin Irrit. 2 - H315
Naphtha solvent heavy petroleum	: 59 - 64 %	64742-94-5	-----	649-424-00-3	----	Xn; R65 ----- Asp. Tox 1 - H304

SECTION 4. First aid measures

4.1. Description of first aid measures

First aid measures

- Inhalation** : Remove victim to fresh air. If breathing is difficult: artificial respiration .
Get medical attention.
- Skin contact** : Remove contaminated clothing and shoes. Wash away remainder with plenty of water.
- Eye contact** : Wash out with plenty of water with the eyelid held wide open for at least 15 minutes. Get medical attention.
- Ingestion** : Wash out mouth with plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.

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** : No specific antidote known. 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** : For small fire : dry chemical powder , water spray carbon dioxide
For large fire : foam , water fog , water spray.

5.2. Special hazards arising from the substance or mixture

- Specific hazards** : Flashback may occur along vapour trail.
- Hazardous decomposition products** : Bromine compounds , nitrogen oxides (NO, NO2) , carbon oxides (CO, CO2) , cyanides .

5.3. Advice for fire-fighters

- Protection against fire** : Self contained breathing apparatus. Wear suitable protective clothing, gloves and eye/face protection.

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SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For emergency responders : Wear suitable protective clothing, gloves and eye/face protection.

6.2. Environmental precautions

Environmental precautions : Do not discharge into the environment.
Do not empty into drains

6.3. Methods and material for containment and cleaning up

Clean up methods : Collect spilled material.
Keep away from heat, open flame and sparks. Absorb in sand or other inert material. Dispose of this material and its container at hazardous or special waste collection point.

6.4. Reference to other sections

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Handling : Ventilation required. Avoid contact with eyes, skin or clothing.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep in original containers. Keep away from food, drink and animal feeding stuffs. Store in dry, well-ventilated area.

Storage - away from : Direct sunlight . Keep away from heat, sparks and flame.

7.3. Specific end use(s)

Precautions in handling and storage : Handle in accordance with good industrial hygiene and safety procedures.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

TLV[©] -TWA [ppm] : Data not available.

8.2. Exposure controls

: Wash hands thoroughly after handling. When using do not eat, drink or smoke. Wash clothing before re-using.

Personal protection

- Respiratory protection : No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation.
- Hand protection : Wear suitable gloves.
- Skin protection : Wear suitable protective clothing Wear safety boots.
- Eye protection : Chemical goggles or safety glasses.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance
Physical state at 20 °C : Liquid
Colour : Brownish
Odour : Aromatic
Odour threshold : Not available
pH : 3-5

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SECTION 9. Physical and chemical properties (continued)

Melting point / Freezing point	: Not applicable
Initial boiling point - boiling range	: Not available
Flash point	: 67°C
Evaporation rate	: Not available
Flammability	: Not applicable for liquids
Explosion limits (lower - upper)	: Not available
Vapour pressure	: Not applicable
Vapour density	: Not available
Relative density	: 1.02-1.05 g/ml (20°C)
Solubility	: Emulsifiable concentrate (EC)
Partition coefficient : n-octanol / water	: 5.9, pH 7 (Bromoxynil octanoate).
Auto-ignition temperature	: 404°C
Decomposition temperature	: Not available
Viscosity	: Not available
Explosive Properties	: Not explosive
Oxidising properties	: Not oxidizing

9.2. Other information

: Not available

SECTION 10. Stability and reactivity

10.1. Reactivity

: Stable under normal conditions.

10.2. Chemical stability

: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization : Will not occur.

10.4. Conditions to avoid

Conditions to avoid : All heat sources, including direct sunlight. Keep away from sources of ignition.

10.5. Incompatible materials

Materials to avoid : oxidizing agents , acids , alkali .

10.6. Hazardous decomposition products

Hazardous decomposition products : Bromine compounds , nitrogen oxides (NO, NO2) , cyanides .

SECTION 11. Toxicological information

On product : Toxicological information is known for the product

11.1. Information on toxicological effects

- Acute toxicity
 - Oral, Rat LD50 (mg/kg) : 632
 - Dermal, Rat LD50 [mg/kg] : > 2,000
 - Inhalation, Rat LC50 [mg/l/4h] : 3.6
- Skin corrosion/irritation : Irritating to skin.
- Serious eye damage/irritation : Minimal irritant
- Respiratory or skin sensitisation : Non sensitizer (guinea-pig).

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SECTION 11. Toxicological information (continued)

- Germ cell mutagenicity : Not mutagenic (Bromoxynil octanoate).
- Carcinogenicity : Not carcinogenic (Bromoxynil octanoate)
- Reproductive toxicity : Possible risk of harm to the unborn child.
- STOT-single exposure : Not available
- STOT-repeated exposure : Not available
- Aspiration hazard : Not available

SECTION 12. Ecological information

On product : Toxicological information is known for the product

12.1. Toxicity

Acute toxicity

- 96 H-LC50 - Rainbow trout [mg/l] : 0.37
- 48 H-EC50 - Daphnia magna [mg/l] : 0.21
- 72 H-EC50 - Algae [mg/l] : 17
- Bees LD50 [µg] : 92.7 /bee contact (48 hours),
92.7 /bee oral (48 hours)
- LD50 Birds [mg/kg] : Bobwhite quail =1,833

Long-term exposure

12.2. Persistence - degradability

Persistence - degradability : Bromoxynil octanoate, Soil :
Biodegradable. Half-life time (t1/2) -1 day

12.3. Bioaccumulative potential

Bioaccumulative potential : Bromoxynil octanoate: BCF=239

12.4. Mobility in soil

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

SECTION 14. Transport information

14.1. UN number

UN N° : 3082

Hazard Label(s)



: 9 : Miscellaneous dangerous substances and articles.

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SECTION 14. Transport information (continued)

14.2. UN proper shipping name

- Land transport - ADR/RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (32% bromoxynil octanoate) 9, III, (E)
- Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (32% bromoxynil octanoate) 9, III, (E)
- H.I. no : 90
- Sea transport - IMO-IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (32% bromoxynil octanoate) 9, III, (E)
- Air transport - ICAO/IATA : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (32% bromoxynil octanoate) 9, III, (E)

14.3. Transport hazard class(es)

- Land transport - ADR/RID : 9
- Sea transport - IMO-IMDG : 9
- IMO-IMDG - class or division : 9
- Air transport - ICAO/IATA : 9

14.4. Packing group

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

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.
R23 - Toxic by inhalation.
R36/38 - Irritating to eyes and skin.
R38 - Irritating to skin.
R41 - Risk of serious damage to eyes.
R43 - May cause sensitization by skin contact.
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R63 - Possible risk of harm to the unborn child.
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.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H319 - Causes serious eye irritation.
H331 - Toxic if inhaled.

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SECTION 16. Other information (continued)

H361d - Suspected of damaging the unborn child.

H400 - Very toxic to aquatic life.

H410 - Very toxic to aquatic life with long lasting effects.

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