



SAFETY DATA SHEET

Fluometuron 500 SC

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Version 1

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Product No HRB00826-S
H-003-RAII / 11102 / AG-F7-500 SC

Product identifier

Fluometuron 500 SC

Synonyms

Cottonex 500 SC

Pure substance/mixture

Mixture

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

Recommended Use

Herbicide

Uses advised against

No information available

Details of the supplier of the safety data sheet

Supplier Address

ADAMA Agan Ltd
P.O.B. 262
ASHDOD Israel

For further information, please contact

Email address

SDS@ADAMA.COM

Emergency Telephone

Emergency Telephone

+972-03-6106666 Subscription no. 36789 (ADAMA Makhteshim Ltd.)

Section 2: HAZARD IDENTIFICATION

Classification of the substance or mixture

Acute toxicity - Oral

Category 4 - (H302)

Chronic aquatic toxicity

Category 2 - (H411)

Label Elements

Hazard pictograms



Signal word	Warning
Hazard Statements	H302 - Harmful if swallowed H411 - Toxic to aquatic life with long lasting effects
Precautionary Statements	P102 - Keep out of reach of children P270 - Do not eat, drink or smoke when using this product P501 - Dispose of contents/ container to an approved waste disposal plant

Other Hazards

No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**Mixture**

Chemical Name	Weight-%	CAS No
Fluometuron	41-45	2164-17-2
Ethylene Glycol	3-5	107-21-1

Section 4: FIRST AID MEASURES**First aid measures**

General advice	In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). First aider: Pay attention to self-protection!.
Inhalation	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician if necessary.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
Ingestion	Rinse mouth. Drink plenty of water. Call a physician or poison control center immediately.
Self-protection of the first aider	Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed**Symptoms** None known**Indication of any immediate medical attention and special treatment needed****Note to physicians** Treat symptomatically.**Section 5: FIRE-FIGHTING MEASURES****Extinguishing media****Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

No information available.

Special hazards arising from the substance or mixture

No specific hazard known.

Advice for firefighters

In the event of fire, wear self-contained breathing apparatus
In the event of fire and/or explosion do not breathe fumes.

Section 6: ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures****Personal precautions**

Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

For emergency responders

Use personal protection recommended in Section 8.

Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up**Methods for cleaning up**

Take up mechanically, placing in appropriate containers for disposal.

Reference to other sections**Other Information**

See also section 8,13

Section 7: HANDLING AND STORAGE**Precautions for safe handling****Advice on safe handling**

Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Use with local exhaust ventilation.

General Hygiene Considerations

When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Regular cleaning of equipment, work area and clothing is recommended. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities**Storage Conditions**

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers.

Specific end use(s)**Risk Management Methods (RMM)**

The information required is contained in this Material Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

National occupational exposure limits

Chemical Name	European Union	United Kingdom	France	Spain	Germany
Ethylene Glycol 107-21-1	S* TWA 20 ppm TWA 52 mg/m ³ STEL 40 ppm STEL 104 mg/m ³	STEL: 40 ppm STEL: 104 mg/m ³ STEL: 30 mg/m ³ TWA: 20 ppm TWA: 52 mg/m ³ TWA: 10 mg/m ³ Skin	TWA: 20 ppm TWA: 52 mg/m ³ STEL: 40 ppm STEL: 104 mg/m ³	S* STEL: 40 ppm STEL: 104 mg/m ³ TWA: 20 ppm TWA: 52 mg/m ³	TWA: 10 ppm TWA: 26 mg/m ³ Ceiling / Peak: 20 ppm Ceiling / Peak: 52 mg/m ³ Skin
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
Ethylene Glycol 107-21-1	TWA: 20 ppm TWA: 52 mg/m ³ STEL: 40 ppm STEL: 104 mg/m ³ Skin	Ceiling: 100 mg/m ³	Skin STEL: 104 mg/m ³ TWA: 52 mg/m ³ TWA: 10 mg/m ³	TWA: 20 ppm TWA: 50 mg/m ³ STEL: 40 ppm STEL: 100 mg/m ³ Skin	TWA: 10 ppm TWA: 26 mg/m ³ TWA: 10 mg/m ³ Skin
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Ethylene Glycol 107-21-1	Skin STEL 20 ppm STEL 52 mg/m ³ TWA: 10 ppm TWA: 26 mg/m ³	Skin STEL: 20 ppm STEL: 52 mg/m ³ TWA: 10 ppm TWA: 26 mg/m ³	STEL: 50 mg/m ³ TWA: 15 mg/m ³	TWA: 10 mg/m ³ TWA: 20 ppm TWA: 52 mg/m ³ Skin Ceiling: 25 ppm STEL: 104 mg/m ³ STEL: 40 ppm	TWA: 10 mg/m ³ TWA: 20 ppm TWA: 52 mg/m ³ STEL: 40 ppm STEL: 104 mg/m ³ Skin

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available.

Exposure controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection

Tight sealing safety goggles.

Body Protection

Rubber boots, Apron, Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact, Gloves made of plastic or rubber.

General Hygiene Considerations When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Regular cleaning of equipment, work area and clothing is recommended. Do not eat, drink or smoke when using this product.

Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

<u>Property</u>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Appearance			
Physical state	: Liquid		
Color	: white		
Odor	: Chlorine		
Odor threshold	: No data available		
pH	: 6.7 - 7.7	CIPAC MT 75.3	solution (1 %)

Melting point/freezing point °C	:	No data available		
Boiling point/boiling range °C	:	No data available		
Flash point °C	:	----	EEC A.9	Not flammable
Evaporation rate	:	Not Applicable		
Flammability (solid, gas)	:	Not Applicable		
Upper/lower flammability or explosive limits	:	No data available		
Vapor pressure kPa	:	No data available		
Vapor density	:	No data available		
Relative density	:	1.11 - 1.21	CIPAC MT 3.3	20 °C
Solubility(ies) mg/l	:	No data available		
Partition Coefficient (n-octanol/water) Log Pow	:			See Section 12 for more information
Autoignition temperature °C	:	462	EEC A.15	
Decomposition temperature °C	:	No data available		
Kinematic viscosity mm ² /s 40 °C	:	46 - 545	CIPAC MT 114	
Explosive properties	:	Not an explosive		
Oxidizing properties	:	No		
Other Information				
Bulk density g/ml	:			Not Applicable
Surface tension mN/m	:	31.7		25 °C

Section 10: STABILITY AND REACTIVITY

Reactivity

Not available.

Chemical stability

Stable under normal conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible Materials

No information available

Hazardous Decomposition Products

None under normal use conditions.

Section 11: TOXICOLOGY INFORMATION

Information on toxicological effects

Acute toxicity

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Oral LD50 mg/kg	: 500 - 1000	Rat	OECD 423	
Dermal LD50 mg/kg	: > 4000	Rat	OECD 402	

Inhalation LC50 mg/l/4h	: > 2.38	Rat	OECD 403	Maximum attainable concentration
Skin corrosion/irritation	: Non-irritating to the skin	Rabbit	OECD 404	
Serious eye damage/eye irritation	: Not irritating to eyes	Rabbit	OECD 405	
Respiratory/skin sensitization	: Not a skin sensitizer	Guinea pig	OECD 406	

Chronic toxicity**Germ cell mutagenicity****Chemical Name**

Fluometuron : Not classified

Carcinogenicity**Chemical Name**

Fluometuron : Not Carcinogenic

Reproductive toxicity**Chemical Name**

Fluometuron : Not toxic for the reproductive system

STOT - single exposure**Chemical Name**

Fluometuron : No data available

STOT - repeated exposure**Chemical Name**

Fluometuron : No data available

Aspiration hazard**Chemical Name**

Fluometuron : No data available

Section 12: ECOLOGICAL INFORMATION**Toxicity****Aquatic toxicity**

Acute toxicity	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Fish 96-hour LC50 mg/l	: > 136	Rainbow trout	OECD 203	
Crustacea 48-hour EC50 mg/l	: 52.5	Daphnia magna	OECD 202	
Algae 72-hour EC50 mg/l	: 3.64	Navicula pelliculosa	OECD 201	
Other plants EC50 mg/l	: 4.99	Lemna	OECD 221	7 days

Terrestrial Toxicity**Birds Oral LD50 mg/kg****Chemical Name**

Fluometuron : > 2150 Bobwhite quail EPA-FIFRA 71-1

Bees Oral LD50 µg/bee**Chemical Name**

Fluometuron : > 34 OECD 213, OECD 214

Persistence and degradability**Abiotic Degradation****Water DT50 days****Chemical Name**

Fluometuron : 74

Soil DT50 days**Chemical Name**

Fluometuron : 63.6

Biodegradation**Bioaccumulative potential****Partition Coefficient
(n-octanol/water) Log Pow****Chemical Name**

	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Fluometuron	: 2.28	OECD 117	pH 7

Bioconcentration factor (BCF)**Chemical Name**

Fluometuron	: 40; 69	OECD 305E	Low
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Mobility in soil**Adsorption/Desorption****Chemical Name**

	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Fluometuron	: 67.4	OECD 106	Koc

Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB

Other adverse effects

No information available.

Section 13: DISPOSAL CONSIDERATIONS

Waste treatment methods**Waste from residues/unused products**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Improper disposal or reuse of this container may be dangerous and illegal.

Other Information

Waste codes should be assigned by the user based on the application for which the product was used.

Section 14: TRANSPORTATION INFORMATION

IMDG/IMO**UN/ID No**

3082

Proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fluometuron)

Hazard Class

9

Packing Group

III

Marine pollutant

Yes

Special precautions for user**RID/ADR****UN/ID No**

3082

Proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fluometuron)

Hazard Class

9

Packing Group

III

Environmental hazard

Yes

Special precautions for user

ICAO/IATA

UN/ID No	3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fluometuron)
Hazard Class	9
Packing Group	III
Environmental hazard	Yes
Special precautions for user	
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not Applicable

**Section 15: REGULATORY INFORMATION**

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

Section 16: OTHER INFORMATION**Revision Note**

*** - Change from previous version.

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet