



SAFETY DATA SHEET

Florasulam 50 SC

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Version 1

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H-0432-16544-RAII / 16544 / AG-F2-050 SC

Product identifier

Florasulam 50 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 aquatic toxicity

Category 1 - (H400)

Chronic aquatic toxicity

Category 1 - (H410)

Label Elements

Hazard pictograms



Signal word	Warning
Hazard Statements	H410 - Very toxic to aquatic life with long lasting effects
Precautionary Statements	P102 - Keep out of reach of children 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
Florasulam	3-6	145701-23-1

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. If symptoms persist, call a physician.
Self-protection of the first aider	Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms	None known
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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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.

For emergency responders

Use personal protection recommended in Section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not allow into any sewer, on the ground or into any body of water. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

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. Use only with adequate ventilation.

General Hygiene Considerations

When using do not eat, drink or smoke. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep container tightly closed in a dry and well-ventilated place.

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

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	Suitable protective clothing.
General Hygiene Considerations	When using do not eat, drink or smoke. Wash contaminated clothing before reuse.
Environmental exposure controls	Local authorities should be advised if significant spillages cannot be contained. Do not allow into any sewer, on the ground or into any body of water. Prevent product from entering drains.

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	: Off-white		
Odor	: characteristic		
Odor threshold	: No data available		
pH	: 4.3 - 5.3	CIPAC MT 75.3	solution (1 %)
Melting point/freezing point °C	: ----		Not Applicable
Boiling point/boiling range °C	: No data available		
Flash point °C	: 99.7	EEC A.9	
Evaporation rate	: Not Applicable		
Flammability (solid, gas)	: Not applicable for liquids		
Upper/lower flammability or explosive limits	: No data available		
Vapor pressure kPa	: ----		Not Applicable
Vapor density	: No data available		
Relative density	: 0.99 - 1.09	CIPAC MT 3.3	g/ml, 20 °C
Solubility(ies) mg/l	: ----		Not Applicable
Partition Coefficient (n-octanol/water) Log Pow	:		See Section 12 for more information
Autoignition temperature °C	: ----	EEC A.15	Not Determined
Decomposition temperature °C	: No data available		
Kinematic viscosity mm²/s 40 °C	: 1787	OECD 114	25 °C
Explosive properties	: Not an explosive		
Oxidizing properties	: Not oxidizing	EEC A.21	
Other Information			
Bulk density g/ml	: ----		Not Applicable
Surface tension mN/m	: 28.8	EEC A.5	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	: > 2000	Rat	OECD 423	
Dermal LD50 mg/kg	: > 2000	Rat	OECD 402	
Inhalation LC50 mg/l/4h	: > 5.6	Rat	OECD 403	
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
Florasulam : Not classified

Carcinogenicity

Chemical Name
Florasulam : Not Carcinogenic

Reproductive toxicity .

Chemical Name
Florasulam : Not toxic for the reproductive system

STOT - single exposure

Chemical Name
Florasulam : No data available

STOT - repeated exposure

Chemical Name
Florasulam : No data available

Aspiration hazard

Chemical Name
Florasulam : No data available

Section 12: ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity

<u>Acute toxicity</u>	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Fish 96-hour LC50 mg/l	: > 100	Rainbow trout	OECD 203	
Crustacea 48-hour EC50 mg/l	: > 100	Daphnia magna	OECD 202	
Algae 72-hour EC50 mg/l	: 0.374	P. subcapitata	OECD 201	
Other plants EC50 mg/l	: 0.015	Lemna gibba	OECD 221	7 days

Terrestrial Toxicity

Birds Oral LD50 mg/kg				
Chemical Name				
Florasulam	: 1046	C. coturnix		

Bees Oral LD50 µg/bee

Chemical Name	
Florasulam	: > 100

Persistence and degradability

<u>Abiotic Degradation</u>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Water DT50 days			
Chemical Name			
Florasulam	: 98 - 100		pH 9, 25 °C
Soil DT50 days			
Chemical Name			
Florasulam	: 0.7 - 4.5		aerobic, 20 °C
Biodegradation			
Chemical Name			
Florasulam	: Not readily biodegradable		

Bioaccumulative potential

<u>Partition Coefficient</u>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
(n-octanol/water) Log Pow			
Chemical Name			
Florasulam	: -1.22		pH 7
Bioconcentration factor (BCF)			
Chemical Name			
Florasulam	: 0.8 - 2.2		

Mobility in soil

<u>Adsorption/Desorption</u>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Chemical Name			
Florasulam	: 4 - 54		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

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