SAFETY DATA SHEET

Fluazinam 500 SC

Revision Date 08-May-2020 **Version** 3 **Product No** FNG56791-E
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Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Fluazinam 500 SC

Pure substance/mixture Mixture

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

Recommended Use Fungicide
Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address ADAMA Makhteshim Ltd
PO Box 60
Beer Sheva 8410001 Israel

For further information, please contact

Email address SDS@ADAMA.COM
Emergency Telephone

Emergency Telephone ADAMA Makhteshim: + 972 8 6560800/801 ; + 972 8 6296713/714
ADAMA Agan : + 972 8 8515341

Section 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

Reproductive toxicity	Category 2 - (H361)
Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 1 - (H410)

Label Elements

Hazard pictograms

Signal word Warning

Hazard Statements
H361 - Suspected of damaging fertility or the unborn child
H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements
P102 - Keep out of reach of children
P201 - Obtain special instructions before use
P280 - Wear protective gloves/protective clothing/eye protection/face protection
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	EC No	GHS Classification	M-Factor
Fluazinam	38-42	79622-59-6		Acute Tox. 4 (H332) Eye Dam. 1 (H318) Skin Sens. 1 (H317) Repr. 2 (H361) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	 M=10 M=10
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-[tris(1-phenylethyl)phenoxy -, ammonium salt	1.5-2.5	119432-41-6		Aquatic Chronic 3 (H412)	

Full text of H- and EUH-phrases: see section 16

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. Never give anything by mouth to an unconscious person.

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
Dry chemical, Carbon dioxide (CO2), Water spray or fog, Foam.

Unsuitable Extinguishing Media
No information available.

Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

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 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.

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. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product.

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. Keep out of the reach of children.

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

Exposure controls

Engineering Controls	Ensure adequate ventilation, especially in confined areas.
Personal protective equipment	
Eye/face protection	Tight sealing safety goggles.
Hand Protection	Suitable chemical resistant gloves (EN 374) also with prolonged, direct contact (recommendation: protection index 6, corresponding > 480 minutes Permeability time (permeation) according to EN 374): e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm).
Body Protection	Use suitable protective clothing and equipment if required, such as safety goggles certified to EN 166, gloves certified to EN 374, protective boots certified to EN 13832, and/or a water repellent woven coverall with 65% polyester and 35 % cotton.
Respiratory protection	Use only with adequate ventilation.
General Hygiene Considerations	When using do not eat, drink or smoke. Wash contaminated clothing before reuse.
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

Property		Values	Method	Remarks
Appearance				
Physical state	:	liquid		
Color	:	yellow		
Odor	:	Slight. characteristic		
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		Decomposes
Flash point °C	:	> 79	CIPAC MT 12.2	
Evaporation rate	:	Not Applicable		

Flammability (solid, gas)	:	Not Applicable		
Upper/lower flammability or explosive limits	:	No data available		
Vapor pressure kPa	:	7.1 x 10-6 Pa	OECD 10	
Vapor density	:	No data available		
Relative density	:	1.23 - 1.33	CIPAC MT 3.3.2	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	:	> 600	EEC A.2	
Decomposition temperature °C	:	148	OECD 113	
Kinematic viscosity mm2/s 40 °C	:	Not Applicable		
Explosive properties	:	No		
Oxidizing properties	:	No		

Other Information

Bulk density g/ml	:	-	Not Applicable
Surface tension mN/m	:	36.2 mN/m	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

		Values	Species	Method	Remarks
Oral LD50 mg/kg	:	> 2000	Rat	OECD 423	
Dermal LD50 mg/kg	:	> 2000	Rat	OECD 402	
Inhalation LC50 mg/l/4h	:	> 4.82	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	skin

Chronic toxicity

Germ cell mutagenicity
Chemical Name
Fluazinam : Not classified

Carcinogenicity .
Chemical Name
Fluazinam : Not Carcinogenic

Reproductive toxicity .
Chemical Name
Fluazinam : H361 - Suspected of damaging fertility or the unborn child

STOT - single exposure
Chemical Name
Fluazinam : No data available

STOT - repeated exposure
Chemical Name
Fluazinam : No data available

Aspiration hazard
Chemical Name
Fluazinam : No data available

Section 12: ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity

Acute toxicity		**Values**	**Species**	**Method**	**Remarks**
Fish 96-hour LC50 mg/l	:	0.236	Oncorhynchus mykiss	92/69/EC C.1 L383A/179	Static
Crustacea 48-hour EC50 mg/l	:	0.36	Daphnia magna	OECD 202	
Algae 72-hour EC50 mg/l	:	0.052	P. subcapitata	OECD 201	
Other plants EC50 mg/l	:				No data available

Chronic aquatic toxicity		**Values**	**Species**	**Method**	**Remarks**
Fish NOEC mg/l	:	0.0029	Pimephales promelas	FIFRA 72-4	278 d (flow-through)
Crustacea NOEC mg/l	:	0.0125	Daphnia magna	OECD 202	21d (static)
Algae NOEC mg/l	:	No data available			
Other plants NOEC mg/l	:	No data available			

Terrestrial Toxicity
Birds Oral LD50 mg/kg
Chemical Name

Fluazinam	:	1782	Bobwhite quail	US EPA 71-1

Bees Oral LD50 µg/bee
Chemical Name

Fluazinam	:	98.9	OECD 213 OECD 214

Persistence and degradability

Abiotic Degradation		**Values**	**Method**	**Remarks**
Water DT50 days				
Chemical Name				
Fluazinam	:	1.9	BBA IV: 5-1	No information

available

Soil DT50 days

Chemical Name			
Fluazinam	: 72.5	SETAC	20 °C

Biodegradation

Chemical Name			
Fluazinam	: Not readily biodegradable	OECD 301 F	

Bioaccumulative potential

Partition Coefficient (n-octanol/water) Partition Coefficient (n-octanol/water) Log Pow	**Values**	**Method**	**Remarks**
Chemical Name			
Fluazinam	: 4.87	OECD 107	pH 7; 22-23 ◦ C

Bioconcentration factor (BCF)

Chemical Name			
Fluazinam	: 960 - 1090		

Mobility in soil

Adsorption/Desorption	**Values**	**Method**	**Remarks**
Chemical Name			
Fluazinam	: 1958	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. (Fluazinam)
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. (Fluazinam)
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. (Fluazinam)
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

* Note: UN3077 & UN3082 – These products may be transported as non-dangerous goods under the special provisions of IMDG Code 2.10.2.7; ADR SP375 and ICAO/IATA A197 when packed in single or inner packaging of up to 5L for liquids or 5 kg or less for solids.

Section 15: REGULATORY INFORMATION

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

Section 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H332 - Harmful if inhaled
H361d - Suspected of damaging the unborn child
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
H412 - Harmful to aquatic life with long lasting effects

Revision Note Changes made to the last version are labeled with this sign ***.

List of Acronyms

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CAS Number - Chemical Abstracts Service number
EC Number - EINECS and ELINCS Number
EINECS - European Inventory of Existing Commercial Substances
ELINCS - European List of notified Chemical Substances
IATA - International Air Transport Association
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG - International Maritime Dangerous Goods
LC50 - Lethal Concentration to 50 % of a test population
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)

OECD - Organization for Economic Co-operation and Development
PBT - Persistent, Bioaccumulative and Toxic substance
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
STOT - Specific Target Organ Toxicity
vPvB - Very Persistent and Very Bioaccumulative

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