



SAFETY DATA SHEET

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

ADM.02852.H.1.A

Revision date 15-Feb-2023

Version 5.01 Supersedes Date: 03-Feb-2021

Product Code(s) HRB00929-M

Print Date 15-Feb-2023

ADM.02852.H.1.A

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

1.1. Product identifier

ADM.02852.H.1.A

Other means of identification

Synonyms

2,4-D/Florasulam 300/6.25 SE

Pure substance/mixture

Mixture

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

Recommended use

Herbicide; Professional use

Uses advised against

No information available

1.3. Details of the supplier of the safety data sheet

Supplier

ADAMA Agan Ltd

P.O.B. 262

ASHDOD Israel

For further information, please contact

E-mail address

SDS@ADAMA.COM

1.4. Emergency telephone number

Emergency Telephone

ADAMA Makhteshim: + 972 8 6560800/801 ; + 972 8 6296713/714

ADAMA Agan : + 972 8 8515341

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin sensitization	Category 1 - (H317)
Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 1 - (H410)

2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Contains 2,4-D-2-ethylhexyl, 1,2-Benzisothiazolin-3-one

Hazard pictograms

**Signal word**

Warning

Hazard statements

H317 - May cause an allergic skin reaction
 H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements

P102 - Keep out of reach of children
 P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
 P501 - Dispose of contents/ container to an approved waste disposal plant

EU Specific Hazard Statements

EUH401 - To avoid risks to human health and the environment, comply with the instructions for use

Additional phrases for PPP

SP1 - Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).

2.3. Other hazards**PBT & vPvB**

The product does not contain any substance(s) classified as PBT or vPvB.

Endocrine Disruptor Information

None known.

Persistent Organic Pollutants

Not applicable.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	CAS No	EC No	Index No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	REACH Registration Number
2,4-D-2-ethylhexyl	1928-43-4	217-673-3	607-308-00-X	42-47	Acute Tox. 4 (H302) Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)		M=1 M=1	No data available
Florasulam	145701-23-1	-	613-230-00-7	0.5-1	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)		M=100 M=100	No data available

1,2-Benzisothiazolin-3-one	2634-33-5	220-120-9	613-088-00-6	< 0.05	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Skin Sens. 1 (H317) Acute Tox. 4 (H302) Aquatic Acute 1 (H400)	Skin Sens. 1 :: C>=0.05%		01-212076154 0-60-XXXX
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Acute toxicity estimates (ATEs) according to Part 3 of Annex VI to Regulation (EC) No 1272/2008 are indicated in this table, if available.

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	In case of accident or if you feel unwell, seek medical advice immediately (show the label where 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.
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.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician if necessary.
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.

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

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

Note to physicians	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	Product is or contains a sensitizer. May cause sensitization by skin contact.
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5.3. Advice for firefighters

Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
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For emergency responders	Use personal protection recommended in Section 8.
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6.2. Environmental precautions

Environmental precautions	See Section 12 for additional Ecological Information.
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6.3. Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
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Methods for cleaning up	Take up mechanically, placing in appropriate containers for disposal.
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Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.
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6.4. Reference to other sections

Reference to other sections	See section 8 for more information. See section 13 for more information.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.
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General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.
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7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.
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7.3. Specific end use(s)

Risk Management Methods (RMM)	The information required is contained in this Safety Data Sheet.
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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Derived No Effect Level (DNEL) No information available.
Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering controls Ensure adequate ventilation, especially in confined areas.

Personal protective equipment
Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls Local authorities should be advised if significant spillages cannot be contained.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

<u>Property</u>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Appearance			
Physical state	: Liquid		
Color	: white		
Odor	: characteristic		
Odor threshold	: No data available		
pH	: 3.5 - 5.5	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	: > 100		aqueous solution
Evaporation rate	: No data available		
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	: 1.05 - 1.09	CIPAC MT 3.3	20 °C
Solubility(ies) mg/l	: No data available		
Partition coefficient Log Pow	:		See Section 12 for additional Ecological Information
Autoignition temperature °C	: 410	EEC A.15	
Decomposition temperature °C	: No data available		
Kinematic viscosity mm ² /s 40 °C	: ----		No data available
Surface tension	: 34.1	EEC A.5	
Particle Size	: Not applicable		

9.2. Other information

Bulk density g/ml : Not applicable

9.2.1. Information with regard to physical hazard classes

Explosive properties : Not an explosive
 Oxidizing properties : Not oxidizing

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

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	: > 5.7	Rat	OECD 436	
Skin corrosion/irritation	: Non-irritating to the skin	Rabbit	OECD 404	
Serious eye damage/eye irritation	: Not irritating to eyes	Rabbit	OECD 405	
Sensitization	: Skin sensitizer	Guinea pig	OECD 406	

Chronic toxicity

Germ cell mutagenicity

Chemical name

2,4-D-2-ethylhexyl : Not classified

Florasulam : Not classified

Carcinogenicity

Chemical name

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2,4-D-2-ethylhexyl : Not Carcinogenic
 Florasulam : Not Carcinogenic

Reproductive toxicity**Chemical name**

2,4-D-2-ethylhexyl : Not toxic for the reproductive system
 Florasulam : Not toxic for the reproductive system

STOT - Single Exposure**Chemical name**

2,4-D-2-ethylhexyl : Not classified
 Florasulam : Not classified

STOT - Repeated Exposure**Chemical name**

2,4-D-2-ethylhexyl : Not classified
 Florasulam : Not classified

Aspiration hazard**Chemical name**

2,4-D-2-ethylhexyl : Not classified
 Florasulam : Not classified

11.2. Information on other hazards**11.2.1. Endocrine disrupting properties**

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information**12.1. Toxicity**

<u>Acute toxicity</u>	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Fish 96-hour LC50 mg/l	: > 100	Oncorhynchus mykiss	OECD 203	
Crustacea 48-hour EC50 mg/l	: > 100	Daphnia magna	OECD 202	
Algae 72-hour EC50 mg/l	: 0.485	P. subcapitata	OECD 201	
Other plants EC50 mg/l	: 0.110	Lemna gibba	OECD 221	days 7

<u>Chronic aquatic toxicity</u>	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Fish NOEC mg/l	: No data available			
Crustacea NOEC mg/l	: No data available			
Algae NOEC mg/l	: No data available			
Other plants NOEC mg/l	: No data available			

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

2,4-D-2-ethylhexyl : > 633 Japanese quail
 Florasulam : 1046 C. coturnix FIFRA 71-1

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

2,4-D-2-ethylhexyl : 100
 Florasulam : > 100 FIFRA 141-1; EPPO 170

12.2. Persistence and degradability**Abiotic Degradation****Water DT50 days****Chemical name**

2,4-D-2-ethylhexyl	: 0.1	OECD 308	
Florasulam	: 98 - 100		pH 9, 25 °C

Soil DT50 days**Chemical name**

2,4-D-2-ethylhexyl	: 1.4	OECD 307	
Florasulam	: 0.7 - 4.5		aerobic 20 °C

Biodegradation**Chemical name**

2,4-D-2-ethylhexyl	: Not available
Florasulam	: Not readily biodegradable

12.3. Bioaccumulative potential**Partition Coefficient (n-octanol/water) Log Pow****Chemical name**

2,4-D-2-ethylhexyl	: 5.78	OECD 121	
Florasulam	: -1.22		pH 7

Bioconcentration factor (BCF)**Chemical name**

2,4-D-2-ethylhexyl	:		Not available
Florasulam	: 0.8 - 2.2		

12.4. Mobility in soil**Adsorption/Desorption****Chemical name**

2,4-D-2-ethylhexyl	: 4.92	OECD 121	KOC
Florasulam	: 4 - 54		KOC

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Waste from residues/unused products**

Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local 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: Transport information**ADR**

14.1 UN number	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D-2-ethylhexyl, Florasulam)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D-2-ethylhexyl, Florasulam), 9, III
14.5 Environmental hazard	Yes
14.6 Special Precautions for Users	
Special Provisions	274, 335, 601, 375
Classification code	M6

RID

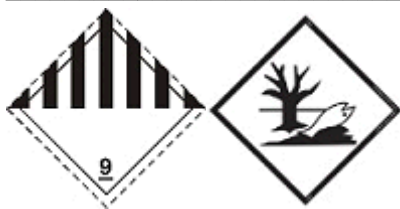
14.1 UN number	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D-2-ethylhexyl, Florasulam)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D-2-ethylhexyl, Florasulam), 9, III
Environmental hazard	Yes
Special Precautions for Users	
14.5 Environmental hazard	Yes
14.6 Special Precautions for Users	
Special Provisions	274, 335, 375, 601
Classification code	M6

IMDG

14.1 UN number	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D-2-ethylhexyl, Florasulam)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D-2-ethylhexyl, Florasulam), 9, III, Marine pollutant
14.5 Environmental hazard	Yes
14.6 Special Precautions for Users	
14.5 Marine pollutant	P
Environmental hazard	Yes
14.6 Special Precautions for Users	
Special Provisions	274, 335, 969
EmS-No	F-A, S-F
IMDG Stowage and segregation	Category A No information available
14.7 Maritime transport in bulk according to IMO instruments	No information available

IATA

14.1 UN number	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D-2-ethylhexyl, Florasulam)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D-2-ethylhexyl, Florasulam), 9, III
14.5 Environmental hazard	Yes
14.6 Special Precautions for Users	
Special Provisions	A97, A158, A197
ERG Code	9L



* 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

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

National regulations

Trade name / designation	Registration Number(s)	Date
Not Applicable	Not Applicable	Not Applicable

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV). This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

15.2. Chemical safety assessment

Chemical Safety Report	A risk assessment was performed according to directive (EC) No. 91/414 or according to regulation (EC) No. 1107/2009.
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SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

H302 - Harmful if swallowed
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

Legend

SVHC: Substances of Very High Concern for Authorization:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Revision date 15-Feb-2023

Reason for revision SDS sections updated

Abbreviations and 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

Classification according to Regulation (EC) No. 1272/2008 [CLP]**Classification of the mixture**

H317 - May cause an allergic skin reaction
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

Classification procedure

Classification based on test data
Classification based on test data
Classification based on Calculation method

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**Disclaimer**

The information provided in this 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