



# SAFETY DATA SHEET

The Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

## Mosquiron 10 EC

Revision date 04-Aug-2022

Version 3 Supersedes Date: 27-Nov-2019

Product Code(s) INS00064-27

Print Date 04-Aug-2022

ADM.07000.1.2.A 7300010

### 1. Identification

#### Product identifier

## Mosquiron 10 EC

#### Other means of identification

Synonyms Novaluron 100 EC  
Registration Number(s) L7818  
Pure substance/mixture Mixture

#### Recommended use of the chemical and restrictions on use

Recommended use Insecticide; Professional use  
Uses advised against No information available

#### Detailed information about the manufacturer, supplier, and/or importer

Supplier ADAMA SOUTH AFRICA (PTY) LTD  
Ground Floor, Simeka House  
The Vineyards Office Estate  
99 Jip de Jager Drive  
Bellville 7530

#### Emergency telephone number

Emergency Telephone +27 82 446 8946 (Griffon Poison Centre)  
+27 86 155 5777 (Tygerberg Poison Information Centre)  
+27 86 100 6366 and +27 83 253 6618 (SPILL TECH)

E-mail address SDS@ADAMA.COM

### 2. Hazard(s) identification

#### Classification of the substance or mixture

Serious eye damage/eye irritation	Category 2 - (H319)
Skin sensitization	Category 1 - (H317)
Reproductive toxicity	Category 1B - (H360)
Specific target organ toxicity (single exposure)	Category 3 - (H335)
Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 1 - (H410)

#### Label elements

Signal word Danger

#### Hazard pictograms



#### Hazard statements

H317 - May cause an allergic skin reaction  
H319 - Causes serious eye irritation  
H335 - May cause respiratory irritation  
H360 - May damage fertility or the unborn child  
H410 - Very toxic to aquatic life with long lasting effects

#### Precautionary statements

P102 - Keep out of reach of children  
P203 - Obtain, read and follow all safety instructions before reuse  
P264+P265 - Wash face, hands and any exposed skin thoroughly after handling. Do not touch eyes  
P260 - Do not breathe dust/fume/gas/mist/vapors/spray  
P270 - Do not eat, drink or smoke when using this product  
P271 - Use only outdoors or in a well-ventilated area  
P272 - Contaminated work clothing should not be allowed out of the workplace  
P273 - Avoid release to the environment  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
P318 - If exposed or concerned get medical advice.  
P319 - Get medical help if you feel unwell  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P321 - Specific treatment (see supplemental first aid instructions on this label)  
P333+317 - If skin irritation or rash occurs get medical help  
P337 + P317 - If eye irritation persists: Get medical help  
P362+364 - Take off contaminated clothing and wash it before reuse  
P391 - Collect spillage  
P405 + P403 - Store locked up in a well ventilated place  
P501 - Dispose of contents/ container to an approved waste disposal plant

#### Additional information

This product is classified as hazardous according to the criteria in South Africa - GHS classification and labelling of chemicals – SANS10234 and the Regulations for Hazardous Chemical Agents - 2021.

#### Other hazards

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

### 3. Composition/information on ingredients

#### Substance

Not applicable

#### Mixture

## Synonyms

Novaluron 100 EC

Chemical name	CAS No	Weight-%	EC No	INTERNATIONAL GHS CLASSIFICATION	M-Factor
N-Methyl-2-pyrrolidone	872-50-4	42-46	212-828-1	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Repr. 1B (H360) STOT SE 3 (H335)	
Poly(oxy-1,2-ethanediyl),.alpha.-(C10-14)alkyl-.omega.-hydroxy, phosphate	68585-36-4	11-14		Skin Corr. 1B (H314)	
Novaluron	116714-46-6	7-11		Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	M=1 M=1000

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

#### Additional information

Note: The other ingredients do not cause or contribute towards the correct GHS classification of Mosquiron 10 EC and are therefore, in terms of the South African Regulations for Hazardous Chemical Agents - 2021. Regulation 14(b), not listed in the table above.

## 4. First-aid measures

### Description of necessary first aid measures

<b>General advice</b>	Show this safety data sheet to the doctor in attendance.
<b>Inhalation</b>	Remove to fresh air. IF exposed or concerned: Get medical advice/attention.
<b>Skin contact</b>	Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.

### For emergency responders

**Self-protection of the first aider** Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

### Most important symptoms/effects, acute and delayed

**Symptoms** Itching. Rashes. Hives. May cause redness and tearing of the eyes. Burning sensation.

### Indication of immediate medical attention and special treatment needed, if necessary

**Note to physicians** May cause sensitization in susceptible persons. Treat symptomatically.

## 5. Fire-fighting measures

### Suitable 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.

#### Specific hazards arising from the chemical

**Specific hazards arising from the chemical** Product is or contains a sensitizer. May cause sensitization by skin contact.

#### Specific/special fire-fighting measures

**Specific/special fire-fighting measures** No information available.

#### Special protective equipment and precautions for fire-fighters

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

### **6. Accidental release measures**

#### 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.

#### Environmental precautions

**Environmental precautions** See Section 12 for additional Ecological Information.

#### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**Other information** Refer to protective measures listed in Sections 7 and 8.

### **7. Handling and storage**

#### Preventive measures 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. Remove contaminated clothing and shoes. Avoid breathing vapors or mists.

#### Precautions for safe handling

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

#### 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.

## 8. Exposure controls/personal protection

### Control parameters

**Exposure guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

### Appropriate engineering controls

**Engineering controls** Ensure adequate ventilation, especially in confined areas.

### Individual protection measures, such as personal protective equipment

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

**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).

**Eye/face protection** Tight sealing safety goggles.

**Skin and 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.

**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.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

<u>Property</u>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
<b>Appearance</b>			
Physical state	: Liquid		
Color	: Salmon pink		
Odor	: characteristic		
<b>Odor threshold</b>	: No data available		
<b>pH</b>	: 2.4 - 3.4	CIPAC MT 75	1 % aqueous solution
<b>Melting point / freezing point °C</b>	: ----		Not applicable
<b>Boiling point / boiling range °C</b>	: No data available		
<b>Flash point °C</b>	: 102	EEC A.9	
<b>Evaporation rate</b>	: ----		No data available
<b>Flammability (solid, gas)</b>	: Not applicable		
<b>Upper/lower flammability or explosive limits</b>	: No data available		
<b>Vapor pressure kPa</b>	: ----		Not applicable
<b>Vapor density</b>	: No data available		
<b>Relative density</b>	: 1.0 - 1.1	OECD 109	
<b>Solubility(ies) mg/l</b>	: ----		Not applicable
<b>Partition coefficient Log Pow</b>	:		See Section 12 for additional Ecological Information
<b>Autoignition temperature °C</b>	: 256	EEC A.15	

<b>Decomposition temperature</b> °C	: No data available	
<b>Kinematic viscosity</b> mm <sup>2</sup> /s 40 °C	: 12.8	OECD 114
<b>Explosive properties</b>	: Not an explosive	EEC A.14
<b>Oxidizing properties</b>	: No data available	
<b>Surface tension</b>	: ----	No data available
<b>Particle Size</b>	: Not applicable	

**Other information**

**Bulk density** g/ml : Not applicable

**10. Stability and reactivity****Reactivity**

**Reactivity** No information available.

**Chemical stability**

**Stability** Stable under normal conditions.

**Explosion data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

**Possibility of hazardous reactions**

**Possibility of hazardous reactions** None under normal processing.

**Conditions to avoid**

**Conditions to avoid** None known based on information supplied.

**Incompatible materials**

**Incompatible materials** None known based on information supplied.

**Hazardous decomposition products**

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

**11. Toxicological information****Information on toxicological effects****Acute toxicity**

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
<b>Oral LD50</b> mg/kg	: > 5000	Rat	EPA-FIFRA 81-1	
<b>Dermal LD50</b> mg/kg	: > 2000	Rat	EPA-FIFRA 81-2	
<b>Inhalation LC50</b> LC50	: No data available			No data available
<b>Skin corrosion/irritation</b>	: Non-irritating to the skin	Rabbit	EPA-FIFRA 81-5	
<b>Serious eye damage/eye irritation</b>	: Irritating to eyes	Rabbit	EPA-OPPTS 870.2400	
<b>Sensitization</b>	: Skin sensitizer	Guinea pig	USEPA 86-5	

**Chronic toxicity****Germ cell mutagenicity**

**Chemical name**

Novaluron : Not classified

<b>Carcinogenicity</b>	.
<b>Chemical name</b>	
Novaluron	: Not Carcinogenic
<b>Reproductive toxicity</b>	.
<b>Chemical name</b>	
Novaluron	: Not toxic for the reproductive system
<b>STOT - Single Exposure</b>	
<b>Chemical name</b>	
Novaluron	: No data available
<b>STOT - Repeated Exposure</b>	
<b>Chemical name</b>	
Novaluron	: No data available
<b>Aspiration hazard</b>	
<b>Chemical name</b>	
Novaluron	: No data available

## 12. Ecological information

### Ecotoxicity

#### Aquatic toxicity

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
<b>Acute toxicity</b>				
Fish 96-hour LC50 mg/l	: 62.4	Oncorhynchus mykiss	OECD 203	
Crustacea 48-hour EC50 mg/l	: 0.00422	Daphnia magna	OECD 202	
Algae 72-hour EC50 mg/l	: 87.2	S. capricornutum	OECD 201	
Other plants EC50 mg/l	: No data available			No data available

#### Chronic aquatic toxicity

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

#### Terrestrial Toxicity

<b>Birds Oral LD50 mg/kg</b>				
<b>Chemical name</b>				
Novaluron	: > 2000	Bobwhite quail	US EPA 71-1	

#### Bees Oral LD50 µg/bee

<b>Chemical name</b>				
Novaluron	: > 100	Apis mellifera	EPPO 170	

#### Abiotic Degradation

<b>Water DT50 days</b>				
<b>Chemical name</b>				
Novaluron	: ----			No data available

#### Soil DT50 days

<b>Chemical name</b>				
Novaluron	: ----			No data available

#### Biodegradation

**Chemical name**

Novaluron : No data available

<b>Log Pow</b>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
<b>Chemical name</b> Novaluron	: 4.3	OECD 107	

<b>Bioconcentration factor (BCF)</b>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
<b>Chemical name</b> Novaluron	: ----		No data available

<b>Adsorption/Desorption</b>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
<b>Chemical name</b> Novaluron	: 9598		KOC

### 13. Disposal considerations

#### Disposal methods

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

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

### 14. Transport information

#### ADR

<b>14.1 UN number</b>	UN3082
<b>14.2 UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Novaluron)
<b>14.3 Transport hazard class(es)</b>	9
<b>Labels</b>	9
<b>14.4 Packing group</b>	III
<b>Description</b>	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Novaluron), 9, III
<b>14.5 Environmental hazard</b>	Yes
<b>14.6 Special Precautions for Users</b>	
<b>Special Provisions</b>	274, 335, 601, 375
<b>Classification code</b>	M6

#### RID

<b>14.1 UN number</b>	UN3082
<b>14.2 UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Novaluron)
<b>14.3 Transport hazard class(es)</b>	9
<b>Labels</b>	9
<b>14.4 Packing group</b>	III
<b>Description</b>	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Novaluron), 9, III
<b>14.5 Environmental hazard</b>	Yes
<b>14.6 Special Precautions for Users</b>	
<b>Special Provisions</b>	274, 335, 375, 601
<b>Classification code</b>	M6

#### IMDG

<b>14.1 UN number</b>	UN3082
<b>14.2 UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Novaluron), Marine pollutant
<b>14.3 Hazard Class</b>	9
<b>14.4 Packing group</b>	III



<b>Description</b>	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Novaluron), 9, III, Marine pollutant
<b>14.5 Marine pollutant</b>	P
<b>Environmental hazard</b>	Yes
<b>14.6 Special Precautions for Users</b>	
<b>Special Provisions</b>	274, 335, 969
<b>EmS-No</b>	F-A, S-F
<b>IMDG Stowage and segregation</b>	Category A
<b>14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code</b>	No information available

**IATA**

<b>14.1 UN number</b>	UN3082
<b>14.2 UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Novaluron)
<b>14.3 Transport hazard class(es)</b>	9
<b>14.4 Packing group</b>	III
<b>Description</b>	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Novaluron), 9, III
<b>14.5 Environmental hazard</b>	Yes
<b>14.6 Special Precautions for Users</b>	
<b>Special Provisions</b>	A97, A158, A197
<b>ERG Code</b>	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

## 15. Regulatory information

### Safety, health and environmental regulations specific for the product in question

Registration Requirements: Fertilizer, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act 36 of 1947). Pesticide Handling, Storage and Disposal Safety: SANS10206: 2020. Safety Data Sheet and Occupational Exposure Limit Requirements: Regulations for Hazardous Chemical Agents – 2021 – SA Occupational Health and Safety Act. SANS11014:2010. Control of and handling of poisonous/hazardous and non-poisonous/non-hazardous substances/chemicals in workplaces: Hazardous Substances Act, 1973 (Act No.15 of 1973). Occupational Health and Safety Act No. 85 of 1993.

## 16. Other information

### Full text of H-Statements referred to under section 3

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

H360 - May damage fertility or the unborn child

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

**Date of preparation of the SDS** No data available

Revision date 04-Aug-2022

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

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

IMDG International Maritime Dangerous Goods (IMDG)  
 IATA International Air Transport Association (IATA)  
 ADR European Agreement concerning the International Carriage of Dangerous Goods by Road

**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

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

**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

**The Globally Harmonized System of Classification and Labeling of Chemicals (GHS)**

**Classification of the mixture**

H317 - May cause an allergic skin reaction  
 H319 - Causes serious eye irritation  
 H335 - May cause respiratory irritation  
 H360 - May damage fertility or the unborn child  
 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  
 Classification based on Calculation method  
 Classification based on test data  
 Classification based on Calculation method

**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**