

# SAFETY DATA SHEET

# **Mosquiron 10 EC**

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 1.01
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# Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### **Product identifier**

# **Mosquiron 10 EC**

Synonyms Novaluron 100 EC

Pure substance/mixture Mixture Formula EC

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

Recommended Use Insecticide

Uses advised against No information available

## Details of the supplier of the safety data sheet

Supplier Address ADAMA SOUTH AFRICA (PTY) LTD

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Emergency Telephone

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## Section 2: HAZARDS IDENTIFICATION

# Classification of the substance or mixture

Serious eye damage/eye irritation
Skin sensitization
Reproductive toxicity
Specific target organ toxicity (single

Category 2 - (H319)
Category 1 - (H317)
Category 1B - (H360)
Category 3 - (H335)

exposure)

Acute aquatic toxicity Category 1 - (H400)
Chronic aquatic toxicity Category 1 - (H410)

Label Elements

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#### Hazard pictograms



Signal word Danger

**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

P102 - Keep out of reach of children **Precautionary Statements** 

P201 - Obtain special instructions before use

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P280 - Wear protective gloves/protective clothing/eye protection/face protection

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

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
Novaluron	7 - 11	116714-46-6		Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	M=1 M=1000
N-Methyl-2-pyrrolidone	42 - 46	872-50-4	212-828-1	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Repr. 1B (H360) STOT SE 3 (H335)	
Poly(oxy-1,2-ethanediyl),.alp ha(C10-14)alkylomegah ydroxy, phosphate		68585-36-4		Skin Corr. 1B (H314)	

# **Section 4: FIRST AID MEASURES**

First aid measures

In case of accident or unwellness, seek medical advice immediately (show directions for General advice

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.

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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 Do NOT induce vomiting. 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.

Indication of any immediate medical attention and special treatment needed

# **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. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

#### For emergency responders

Use personal protection recommended in Section 8.

#### **Environmental precautions**

Do not allow into any sewer, on the ground or into any body of water. Should not be released into the environment. 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

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#### 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. Use only with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems.

## **General Hygiene Considerations**

When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Take off all contaminated clothing and wash it before reuse. Wear suitable gloves and eye/face protection.

# 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 dry, cool and 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
N-Methyl-2-pyrrolidone 872-50-4		STEL: 75 ppm STEL: 309 mg/m³ TWA: 10 ppm TWA: 40 mg/m³ Skin	TWA: 40 mg/m³ TWA: 10 ppm STEL: 80 mg/m³ STEL: 20 ppm	S* STEL: 20 ppm STEL: 80 mg/m³ TWA: 10 ppm TWA: 40 mg/m³	TWA: 20 ppm TWA: 82 mg/m³ Ceiling / Peak: 40 ppm Ceiling / Peak: 164 mg/m³ Skin
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
N-Methyl-2-pyrrolidone			Skin	TWA: 10 ppm	TWA: 5 ppm
872-50-4			STEL: 80 mg/m <sup>3</sup> TWA: 40 mg/m <sup>3</sup>	TWA: 40 mg/m <sup>3</sup> STEL: 20 ppm	TWA: 20 mg/m <sup>3</sup> Skin
			TWA. 40 mg/m	STEL: 20 ppin STEL: 80 mg/m <sup>3</sup>	OKIII
				Skin	
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
N-Methyl-2-pyrrolidone	Skin	Skin	STEL: 80 mg/m <sup>3</sup>	TWA: 5 ppm	TWA: 25 ppm
872-50-4	STEL 20 ppm	STEL: 40 ppm	TWA: 40 mg/m <sup>3</sup>	TWA: 20 mg/m <sup>3</sup>	TWA: 101 mg/m <sup>3</sup>
	STEL 80 mg/m <sup>3</sup>	STEL: 160 mg/m <sup>3</sup>	Skin	Skin	Skin
	TWA: 10 ppm	TWA: 20 ppm		STEL: 20 ppm	
	TWA: 40 mg/m <sup>3</sup>	TWA: 80 mg/m <sup>3</sup>		STEL: 80 mg/m <sup>3</sup>	

## Exposure controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

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

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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** Gloves made of plastic or rubber, Suitable protective clothing, Rubber boots, Wear

impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact, Wear chemical resistant clothing such as gloves,

apron, boots or whole bodysuits made from neoprene, as appropriate.

**Respiratory protection** Use only with adequate ventilation.

**General Hygiene Considerations** When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Keep

away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Take off all contaminated clothing

and wash it before reuse. Wear suitable gloves and eye/face protection.

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

Property	<u>Values</u>	<u>Method</u>	Remarks
Appearance			
Physical state	: Liquid		
Color	: Salmon pink		
Odor	: characteristic		
Odor threshold	: No data available		
рН	: 2.4 - 3.4	CIPAC MT 75	1 % aqueous solution
Melting point/freezing point °C	:		Not Applicable
Boiling point/boiling range °C	: No data available		
Flash point °C	: 102	EEC A.9	
Evaporation rate	:		No data available
Flammability (solid, gas)	: Not applicable for liquids		
Upper/lower flammability or	: No data available		
explosive limits			
Vapor pressure kPa	:		Not Applicable
Vapor density	: No data available		
Relative density	: 1.0 - 1.1	OECD 109	
Solubility(ies) mg/l	:		Not Applicable
Partition Coefficient	:		See Section 12 for more
(n-octanol/water) Log Pow			information
Autoignition temperature °C	: 256	EEC A.15	
Decomposition temperature °C	: No data available		
Kinematic viscosity mm2/s 40 °C	: 12.8	OECD 114	
Explosive properties	: Not an explosive	EEC A.14	
Oxidizing properties	: No data available		
Other Information			
Bulk density g/ml	:		Not Applicable

# **Section 10: STABILITY AND REACTIVITY**

Reactivity

Surface tension mN/m

No data available

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Not available.

Chemical stability

Stable under normal conditions.

## Possibility of Hazardous Reactions

None under normal processing.

#### Conditions to avoid

Exposure to air or moisture over prolonged periods.

#### Incompatible Materials

No information available

## <u>Hazardous Decomposition Products</u>

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

# **Section 11: TOXICOLOGY INFORMATION**

#### Information on toxicological effects

**Acute toxicity** 

 Values
 Species
 Method
 Remarks

 Oral LD50 mg/kg
 : > 5000
 Rat
 EPA-FIFRA 81-1

 Dermal LD50 mg/kg
 : > 2000
 Rat
 EPA-FIFRA 81-2

Inhalation LC50 mg/l/4h :

No data available

Skin corrosion/irritation: Non-irritating to the skinRabbitEPA-FIFRA 81-5Serious eye damage/eye irritation: Irritating to eyesRabbitEPA-OPPTS870.2400

Respiratory/skin sensitization : Skin sensitizer Guinea pig USEPA 86-5

**Chronic toxicity** 

Germ cell mutagenicity

**Chemical Name** 

Novaluron : Not classified

Carcinogenicity

**Chemical Name** 

Novaluron : Not Carcinogenic

Reproductive toxicity .

**Chemical Name** 

Novaluron : Not toxic for the reproductive system

STOT - single exposure

**Chemical Name** 

Novaluron : No data available

STOT - repeated exposure

Chemical Name

Novaluron : No data available

Aspiration hazard Chemical Name

Novaluron : No data available

# Section 12: ECOLOGICAL INFORMATION

Toxicity

**Aquatic toxicity** 

**Acute toxicity** Method Values Species Remarks

Fish 96-hour LC50 mg/l 62.4 Rainbow trout **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

Chronic aquatic toxicity Species Method Remarks

Values No data available Fish NOEC mg/l 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** 

Novaluron : > 2000 Bobwhite quail US EPA 71-1

Bees Oral LD50 µg/bee

**Chemical Name** 

Novaluron : > 100 Apis mellifera **EPPO 170** 

Persistence and degradability

**Abiotic Degradation** Values Method Remarks

Water DT50 days **Chemical Name** 

Novaluron No data available

Soil DT50 days Chemical Name

No data available Novaluron

**Biodegradation Chemical Name** 

Novaluron : No data available

Bioaccumulative potential

**Partition Coefficient** Values Method Remarks

(n-octanol/water) Partition Coefficient (n-octanol/water) Log

Pow

**Chemical Name** 

Novaluron : 4.3 **OECD 107** 

**Bioconcentration factor (BCF)** 

**Chemical Name** 

Novaluron No data available

Mobility in soil

Adsorption/Desorption Method Remarks Values

Chemical Name

Novaluron : 9598 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

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

products

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Contaminated packaging

Do not reuse container.

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. ( Novaluron )

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. ( Novaluron )

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. ( Novaluron )

Hazard Class 9
Packing Group III
Environmental hazard Yes

Special precautions for user

Transport in bulk according to Not Applicable

Annex II of MARPOL 73/78 and the

**IBC Code** 



<sup>\*</sup> Note: UN3077 & UN3082 – These products may be transported as non-dangerous goods under the special provisions of IMDG Code 2.10.2.7;

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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

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

H314 - Causes severe skin burns and eye damage

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H360D - May damage the unborn child

H335 - May cause respiratory irritation

#### **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 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**