



SAFETY DATA SHEET

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

Seizer 100 EC

Revision date 03-Nov-2022

Version 2 Supersedes Date: 25-Sep-2020

Product Code(s) INS00165-27

Print Date 03-Nov-2022

ADM.03500.I.1.B 9500913

1. Identification

Product identifier

Seizer 100 EC

Other means of identification

Synonyms Bifenthrin 100 EC
Formula EC
Registration Number(s) L7471
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

Aspiration hazard	Category 1 - (H304)
Acute toxicity - Oral	Category 4 - (H302)
Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 1 - (H318)
Specific target organ toxicity (single exposure)	Category 3 - (H336)
Specific target organ toxicity (repeated exposure)	Category 2 - (H373)
Acute aquatic toxicity	Category 1 - (H400)

Chronic aquatic toxicity	Category 1 - (H410)
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Label elements

Signal word Danger

Hazard pictograms**Hazard statements**

H302 - Harmful if swallowed
 H304 - May be fatal if swallowed and enters airways
 H315 - Causes skin irritation
 H318 - Causes serious eye damage
 H336 - May cause drowsiness or dizziness
 H373 - May cause damage to organs through prolonged or repeated exposure
 H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements

P102 - Keep out of reach of children
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray
 P264 + P265 - Wash face, hands and any exposed skin thoroughly after handling. Do not touch eyes
 P270 - Do not eat, drink or smoke when using this product
 P271 - Use only outdoors or in a well-ventilated area
 P273 - Avoid release to the environment
 P280 - Wear protective gloves and eye/face protection
 P301 + P316 - IF SWALLOWED: Get emergency medical help immediately
 P301+317 - IF SWALLOWED: Get medical help
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
 P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 P305+P354_P388 - IF IN EYE: Immediately rinse with water for several minutes. Remove contact lenses if present, and easy to do
 P317 - Get medical help
 P319 - Get medical help if you feel unwell
 P321 - Specific treatment (see supplemental first aid instructions on this label)
 P330 - Rinse mouth
 P331 - Do NOT induce vomiting
 P332 + P317 - If skin irritation occurs, Get medical help
 P362 + P364 - Take off contaminated clothing and wash it before reuse
 P391 - Collect spillage
 P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
 P405 - Store locked up
 P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

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

Bifenthrin 100 EC

Chemical name	CAS No	Weight-%	EC No	INTERNATIONAL GHS CLASSIFICATION	M-Factor
Solvent naphtha, petroleum, heavy arom.	64742-94-5	76-85	265-198-5	Flam. Liq. 4 (H227) Asp. Tox. 1 (H304) STOT SE 3 (H336) Acute aquatic 2 (H401) Aquatic Chronic 2 (H411)	
Bifenthrin	82657-04-3	9-12		Acute Tox. 3 (H301) Acute Tox. 3 (H331) STOT RE 2 (H373) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	M=10000 M=100000
Benzenesulfonic acid, C10-13-(linear)alkyl derivs., calcium salt	-	2-4	932-231-6	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)	
2-Ethylhexan-1-ol	104-76-7	1-3	203-234-3	Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)	

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 Seizer 100 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

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. Get medical attention immediately if symptoms occur.

Ingestion

Do NOT induce vomiting. Rinse mouth. If swallowed, call a poison control center or physician immediately.

For emergency responders

Self-protection of the first aider

Use personal protective equipment as required.

Most important symptoms/effects, acute and delayed

Symptoms None known.

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

Note to physicians 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 No information available.

Flammable properties Combustible material

Explosive properties No data available.

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. Use personal protective equipment as required. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so.

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. Do not eat, drink or smoke when using this product. Ensure adequate ventilation. Take off contaminated clothing and wash before reuse.

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. Keep out of the reach of children. Store locked up. Store away from other materials.

Incompatible materials Strong acids. Strong bases. Strong oxidizing agents.

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>
Appearance			

Physical state	: Liquid	
Color	: clear Yellowish	
Odor	: chemical	
Odor threshold	: No data available	
pH	: 5.2 - 6.2	solution (1%)
Melting point / freezing point °C	: No data available	Not applicable
Boiling point / boiling range °C	: No data available	
Flash point °C	: 67	
Evaporation rate	: -	No data available
Flammability (solid, gas)	: Not applicable for liquids	
Upper/lower flammability or explosive limits	: No data available	
Vapor pressure kPa	: No data available	Not applicable
Vapor density	: No data available	
Relative density	: 0.88 - 0.98	
Solubility(ies) mg/l	: No data available	Not applicable
Partition coefficient Log Pow	:	See Section 12 for additional Ecological Information
Autoignition temperature °C	: No data available	
Decomposition temperature °C	: No data available	
Kinematic viscosity mm²/s 40 °C	: 1.86	
Explosive properties	: No data available	
Oxidizing properties	: No data available	
Surface tension	: -	No data available
Particle Size	: 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 Strong acids. Strong bases. Strong oxidizing agents.

Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on toxicological effects

Acute toxicity

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Oral LD50 mg/kg	: 300 - 2000	Rat	OECD 423	Maximum attainable concentration
Dermal LD50 mg/kg	: > 4000	Rat	OECD 402	
Inhalation LC50 LC50	: > 5.25	Rat	OECD 403	
Skin corrosion/irritation	: Irritating to skin	Rabbit	OECD 404	
Serious eye damage/eye irritation	: Serious eye damage/eye irritation	Rabbit	OECD 405	
Sensitization	: Not a skin sensitizer	Guinea pig	OECD 406	

Chronic toxicity

Germ cell mutagenicity

Chemical name
Bifenthrin : Not classified

Carcinogenicity

Chemical name
Bifenthrin : Not classified

Reproductive toxicity

Chemical name
Bifenthrin : Not classified

STOT - Single Exposure

Chemical name
Bifenthrin : No data available

STOT - Repeated Exposure

Chemical name
Bifenthrin : No data available

Aspiration hazard

Chemical name
Bifenthrin : No data available

12. Ecological information

Ecotoxicity

Aquatic toxicity

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Acute toxicity				
Fish 96-hour LC50 mg/l	: 0.031	Poecilia reticulata	OECD 203	No data available
Crustacea 48-hour EC50 mg/l	: No data available			No data available
Algae 72-hour EC50 mg/l	: No data available			No data available
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>
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

Bifenthrin : 1800 Bobwhite quail EPA-OPPTS
850.2100

Bees Oral LD50 µg/bee

Chemical name

Bifenthrin : 0.39 OECD 213 OECD Oral
214

Abiotic Degradation**Water DT50 days**

Chemical name

Bifenthrin : 161.1

Soil DT50 days

Chemical name

Bifenthrin : 86.8 Field

Biodegradation

Chemical name

Bifenthrin : No data available

Log Pow

Chemical name

	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Bifenthrin	: > 6.71	OECD 107	

Bioconcentration factor (BCF)

Chemical name

Bifenthrin	: 417	OECD 305	
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Adsorption/Desorption

Chemical name

	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Bifenthrin	: 236,610		KOC Not mobile

13. Disposal considerations**Disposal 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.

14. Transport information**ADR****14.1 UN number**

UN3082

14.2 UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Solvent naphtha, petroleum, heavy arom., Bifenthrin)

14.3 Transport hazard class(es)

9

Labels

9

14.4 Packing group

III

Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Solvent naphtha, petroleum, heavy arom., Bifenthrin), 9, III, (-)
14.5 Environmental hazard	Yes
14.6 Special Precautions for Users	
Special Provisions	274, 335, 601, 375
Classification code	M6
Tunnel restriction code	(-)

RID

14.1 UN number	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Solvent naphtha, petroleum, heavy arom., Bifenthrin)
14.3 Transport hazard class(es)	9
Labels	9
14.4 Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Solvent naphtha, petroleum, heavy arom., Bifenthrin), 9, III
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. (Solvent naphtha, petroleum, heavy arom., Bifenthrin)
14.3 Hazard Class	9
14.4 Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Solvent naphtha, petroleum, heavy arom., Bifenthrin), 9, III, Marine pollutant
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
14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code	No information available

IATA

14.1 UN number	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Solvent naphtha, petroleum, heavy arom., Bifenthrin)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Solvent naphtha, petroleum, heavy arom., Bifenthrin), 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

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

H301 - Toxic if swallowed
 H304 - May be fatal if swallowed and enters airways
 H315 - Causes skin irritation
 H318 - Causes serious eye damage
 H331 - Toxic if inhaled
 H332 - Harmful if inhaled
 H336 - May cause drowsiness or dizziness
 H373 - May cause damage to organs through prolonged or repeated exposure
 H400 - Very toxic to aquatic life
 H410 - Very toxic to aquatic life with long lasting effects
 H411 - Toxic to aquatic life with long lasting effects
 H412 - Harmful to aquatic life with long lasting effects

Date of preparation of the SDS No data available

Revision date 03-Nov-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**

H302 - Harmful if swallowed
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H373 - May cause damage to organs through prolonged or repeated exposure
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Classification procedure

Classification based on test data
Classification based on Calculation method
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