



SAFETY DATA SHEET

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

Almagor

Revision date 09-Nov-2022

Version 3 Supersedes Date: 25-Apr-2022

Product Code(s)

FNG56918-27

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ADM.00156.F.1.A 9502077

1. Identification

Product identifier

Almagor

Other means of identification

Synonyms Prochloraz 200 Tebuconazole 100 Azoxystrobin 56 EC
Formula EC
Registration Number(s) L10077
Pure substance/mixture Mixture

Recommended use of the chemical and restrictions on use

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

Label elements

Signal word Warning

Hazard pictograms



Hazard statements

H319 - Causes serious eye irritation
 H361d - Suspected of damaging the unborn child
 H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements

P102 - Keep out of reach of children
 P273 - Avoid release to the environment
 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
 P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P337 + P317 - If eye irritation persists: Get medical help
 P318 - If exposed or concerned get medical advice.
 P391 - Collect spillage
 P405 - Store locked up
 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

Prochloraz 200 Tebuconazole 100 Azoxystrobin 56 EC

Chemical name	CAS No	Weight-%	EC No	INTERNATIONAL GHS CLASSIFICATION	M-Factor
Acetophenone	98-86-2	33-37	202-708-7	Acute Tox. 4 (H302) Eye Irrit. 2 (H319)	
Prochloraz	67747-09-5	16-20	266-994-5	Acute Tox. 4 (H302) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	M=1 M=10
Propanoic acid, 2-hydroxy-, 2-ethylhexyl ester	186817-80-1	11-14	606-097-1	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317)	

Tebuconazole	107534-96-3	7-11	403-640-2	Acute Tox. 4 (H302) Repr. 2 (H361d) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	M=1 M=10
Benzenesulfonic acid, C10-13-(linear)alkyl derivs., calcium salt	-	4-7	932-231-6	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)	
Azoxystrobin	131860-33-8	4-7	603-524-3	Acute Tox. 3 (H331) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	M=10 M=10 ATE = 0.7 mg/L (dusts/mists)
Tristyrylphenol ethoxylate phosphate ester	114535-82-9	2-5		Eye Irrit. 2 (H319)	
Poly(oxy-1,2-ethanediyl), .alpha.-[tris(1-phenylethyl)phenyl]-.om ega.-hydroxy-	99734-09-5	2-5	-	Aquatic Chronic 3 (H412)	
2-Ethylhexan-1-ol	104-76-7	2-4	203-234-3	Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)	
orthophosphoric acid	7664-38-2	< 0.5	231-633-2	Acute Tox. 4 (H302) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Met. Corr. 1 (H290)	

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 Almagor 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 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.

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

Rinse mouth. Drink plenty of water. If symptoms persist, call a physician.

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

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.

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. Do not eat, drink or smoke when using this product. Remove

contaminated clothing and shoes.

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 Store locked up. Keep containers tightly closed in a dry, cool and well-ventilated place.

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

Chemical name	ACGIH TLV
Acetophenone 98-86-2	TWA: 10 ppm
orthophosphoric acid 7664-38-2	STEL: 3 mg/m ³ TWA: 1 mg/m ³

Other information South Africa for Phosphoric acid, CAS. no.: 7664-38-2: OEL eight-hour TWA - 2 mg/m³, OEL-STEL/C - 6 mg/m³

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

Property	Values	Method	Remarks
Appearance			
Physical state	: Liquid		
Color	: yellow		
Odor	: characteristic		

Odor threshold	:	No data available		
pH	:	5 - 7	CIPAC MT 75	solution (1%)
Melting point / freezing point °C	:	No data available		
Boiling point / boiling range °C	:	----		No data available
Flash point °C	:	92	CIPAC MT 12	
Evaporation rate	:	No data available		
Flammability (solid, gas)	:	Not applicable		
Upper/lower flammability or explosive limits	:	No data available		
Vapor pressure kPa	:	----		
Vapor density	:	No data available		
Relative density	:	1.047 - 1.147	OECD 109	201 °C
Solubility(ies) mg/l	:	----		
Partition coefficient Log Pow	:			See Section 12 for additional Ecological Information
Autoignition temperature °C	:	----		
Decomposition temperature °C	:	----		
Kinematic viscosity mm²/s 40 °C	:	73.2	OECD 114 OPPTS 830.6316	20°C
Explosive properties	:	Not an explosive		
Oxidizing properties	:	No data available		
Surface tension	:	----		
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 None known based on information supplied.

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	: > 2000	Rat	OECD 425	Maximum attainable concentration
Dermal LD50 mg/kg	: > 2000	Rat	OECD 402	
Inhalation LC50 LC50	: > 1.52	Rat		
Skin corrosion/irritation	: Non-irritating to the skin	Rabbit	OECD 404	
Serious eye damage/eye irritation	: Irritating to eyes	Rabbit	OECD 405	
Sensitization	: Not a skin sensitizer	Guinea pig	OECD 406	

Chronic toxicity**Germ cell mutagenicity****Chemical name**

Prochloraz	: Not classified
Tebuconazole	: Not classified
Azoxystrobin	: Not classified

Carcinogenicity**Chemical name**

Prochloraz	: Not Carcinogenic
Tebuconazole	: Not Carcinogenic
Azoxystrobin	: Not Carcinogenic

Reproductive toxicity**Chemical name**

Prochloraz	: Not toxic for the reproductive system
Tebuconazole	: H361d - Suspected of damaging the unborn child
Azoxystrobin	: Not toxic for the reproductive system

STOT - Single Exposure**Chemical name**

Prochloraz	: Not classified
Tebuconazole	: Not classified
Azoxystrobin	: Not classified

STOT - Repeated Exposure**Chemical name**

Prochloraz	: Not classified
Tebuconazole	: Not classified
Azoxystrobin	: Not classified

Aspiration hazard**Chemical name**

Prochloraz	: Not classified
Tebuconazole	: Not classified
Azoxystrobin	: Not classified

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	: 0.4	Poecilia reticulata	OECD 203	

Crustacea 48-hour EC50 mg/l	:	5.31	Daphnia magna	OECD 202	
Algae 72-hour EC50 mg/l	:	0.83	Selenastrum 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>
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					
Prochloraz	:	624	Bobwhite quail	US EPA 71-1	
Tebuconazole	:	1988	Bobwhite quail		
Azoxystrobin	:	>2000	Bobwhite quail		
Bees Oral LD50 µg/bee					
Chemical name					
Prochloraz	:	14.89	Apis mellifera	WD 7/3, MAFF UK	contact
Tebuconazole	:	83.05			Oral
Azoxystrobin	:	>25			
Abiotic Degradation					
Water DT50 days					
Chemical name					
Prochloraz	:	3.5			
Tebuconazole	:	365			
Azoxystrobin	:	205			pH 6.4-7.5 ;20 ° C
Soil DT50 days					
Chemical name					
Prochloraz	:	223.62			
Tebuconazole	:	34.8			
Azoxystrobin	:	262			20 ° C
Biodegradation					
Chemical name					
Prochloraz	:	Not readily biodegradable		OECD 301 D	
Tebuconazole	:	Not readily biodegradable		OECD 301B	
Azoxystrobin	:				
Log Pow					
Chemical name		<u>Values</u>		<u>Method</u>	<u>Remarks</u>
Prochloraz	:	4.3		EEC A.8	
Tebuconazole	:	3.7			
Azoxystrobin	:	2.7		OECD 107	pH 5; 20 ° C
Bioconcentration factor (BCF)					
Chemical name					
Prochloraz	:	150-247			
Tebuconazole	:	78			
Azoxystrobin	:	...			No data available
Adsorption/Desorption					
Chemical name		<u>Values</u>		<u>Method</u>	<u>Remarks</u>
Prochloraz	:	1222-8654			KOC
Propanoic acid, 2-hydroxy-, 2-ethylhexyl ester	:	No information available			KOC

Tebuconazole	: 769	KOC
Azoxystrobin	: 2.5	KOC

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. (Prochloraz, Tebuconazole)
14.3 Transport hazard class(es)	9
Labels	9
14.4 Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Prochloraz, Tebuconazole), 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. (Prochloraz, Tebuconazole)
14.3 Transport hazard class(es)	9
Labels	9
14.4 Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Prochloraz, Tebuconazole), 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. (Prochloraz, Tebuconazole)
14.3 Hazard Class	9
14.4 Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Prochloraz, Tebuconazole), 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. (Prochloraz, Tebuconazole)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Prochloraz, Tebuconazole), 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

H290 - May be corrosive to metals
 H302 - Harmful if swallowed
 H314 - Causes severe skin burns and eye damage
 H315 - Causes skin irritation
 H317 - May cause an allergic skin reaction
 H318 - Causes serious eye damage
 H319 - Causes serious eye irritation
 H331 - Toxic if inhaled
 H332 - Harmful if inhaled
 H335 - May cause respiratory irritation
 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

Date of preparation of the SDS No data available

Revision date 09-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

H319 - Causes serious eye irritation
 H361 - Suspected of damaging 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 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