



SAFETY DATA SHEET

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

Almagor

Revision date 25-Apr-2022

Version 2 Supersedes Date: 25-Jun-2019

Product Code(s)

FNG56918-27

Print Date 25-Apr-2022

MCW 1086 9502077

1. Identification

Product identifier

Almagor

Other means of identification

Synonyms Prochloraz 200 Tebuconazole 100 Azoxystrobin 56 EC
Formula EC
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
+ 27 86 155 5777
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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)
Flammable liquids	Category 4 - (H227)

Label elements

Signal word Warning

Hazard pictograms



Hazard statements

H319 - Causes serious eye irritation
 H361 - Suspected of damaging fertility or the unborn child
 H410 - Very toxic to aquatic life with long lasting effects
 H227 - Combustible liquid

Precautionary statements

P102 - Keep out of reach of children
 P201 - Obtain special instructions before use
 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
 No smoking
 P243 - Take precautionary measures against static discharge
 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
 P501 - Dispose of contents/ container to an approved waste disposal plant

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	31-35	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
Azoxystrobin	131860-33-8	4-6	603-524-3	Acute Tox. 3 (H331) Aquatic Acute 1 (H400)	M=10 M=10

				Aquatic Chronic 1 (H410)	ATE = 0.7 mg/L (dusts/mists)
calcium dodecylbenzenesulphonate	26264-06-2	4-6	247-557-8	Skin Irrit. 2 (H315) Eye Dam. 1 (H318)	
2-Ethylhexan-1-ol	104-76-7	2-4	203-234-3	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	
2,4,6-Tris(1-phenylethyl)polyoxyethylenated phosphates	90093-37-1	2-4		Eye Irrit. 2 (H319)	

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. If symptoms persist, call a physician.
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 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 Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

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

Chemical name	ACGIH TLV
Acetophenone 98-86-2	TWA: 10 ppm

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 Wear suitable gloves.

Eye/face protection If splashes are likely to occur, wear safety glasses with side-shields.

Skin and body protection Wear suitable protective clothing.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

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	: 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	
Dermal LD50 mg/kg	: > 2000	Rat	OECD 402	
Inhalation LC50 LC50	: > 1.52	Rat		Maximum attainable concentration
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****Acute toxicity**

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
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 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**

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 Classification code	274, 335, 601, 375 M6
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 Classification code	274, 335, 375, 601 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



15. Regulatory information

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

16. Other information

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
 H319 - Causes serious eye irritation
 H331 - Toxic if inhaled
 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

Date of preparation of the SDS No data available

Revision date 25-Apr-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

H227 - Combustible liquid
 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 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