



SAFETY DATA SHEET

Agil 100 EC

Revision Date 22-Oct-2019

Version 1

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

Product identifier

Agil 100 EC

Pure substance/mixture Mixture

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

Recommended Use Herbicide
Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address ADAMA SOUTH AFRICA (PTY) LTD
Ground Floor, Simeka House
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Section 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

Aspiration toxicity	Category 1 - (H304)
Acute toxicity - Oral	Category 4 - (H302)
Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 1 - (H318)
Skin sensitization	Category 1 - (H317)
Reproductive toxicity	Category 1B - (H360)
Chronic aquatic toxicity	Category 2 - (H411)

Label Elements

Hazard pictograms



Signal word

Danger

Hazard Statements

H302 - Harmful if swallowed
 H304 - May be fatal if swallowed and enters airways
 H315 - Causes skin irritation
 H317 - May cause an allergic skin reaction
 H318 - Causes serious eye damage
 H360 - May damage fertility or the unborn child
 H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements

P102 - Keep out of reach of children
 P201 - Obtain special instructions before use
 P270 - Do not eat, drink or smoke when using this product
 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
 P331 - Do NOT induce vomiting
 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
Propaquizafop	8 - 12	111479-05-1		Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	M=1 M=1
N-Methyl-2-pyrrolidone	8 - 12	872-50-4	212-828-1	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Repr. 1B (H360) STOT SE 3 (H335)	
Hydrocarbons, C10-C13, aromatics, <1% naphthalene	37 - 41	N/A	922-153-0	Asp. Tox. 1 (H304) Aquatic Chronic 2 (H411)	
Alcohols, C11-14-iso-, C13-rich, ethoxylated (7-15 EO)	37 - 41	78330-21-9	500-027-2	Acute Tox. 4 (H302) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)	

Section 4: FIRST AID MEASURES

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. Call a physician immediately.
Ingestion	Rinse mouth. Do NOT induce vomiting. Call a physician or poison control center immediately.
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

Note to physicians Treat symptomatically.

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. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

For emergency responders

Use personal protection recommended in Section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system.

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

Other Information

See also section 8,13

Section 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray. 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. Keep away from food, drink and animal feeding stuffs. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. 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 cool, well-ventilated place. 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/m ³ TWA: 10 ppm TWA: 40 mg/m ³ Skin	TWA: 40 mg/m ³ TWA: 10 ppm STEL: 80 mg/m ³ STEL: 20 ppm	S* STEL: 20 ppm STEL: 80 mg/m ³ TWA: 10 ppm TWA: 40 mg/m ³	TWA: 20 ppm TWA: 82 mg/m ³ Ceiling / Peak: 40 ppm Ceiling / Peak: 164 mg/m ³ Skin
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
N-Methyl-2-pyrrolidone 872-50-4			Skin STEL: 80 mg/m ³ TWA: 40 mg/m ³	TWA: 10 ppm TWA: 40 mg/m ³ STEL: 20 ppm STEL: 80 mg/m ³ Skin	TWA: 5 ppm TWA: 20 mg/m ³ Skin
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
N-Methyl-2-pyrrolidone 872-50-4	Skin STEL 20 ppm STEL 80 mg/m ³ TWA: 10 ppm TWA: 40 mg/m ³	Skin STEL: 40 ppm STEL: 160 mg/m ³ TWA: 20 ppm TWA: 80 mg/m ³	STEL: 80 mg/m ³ TWA: 40 mg/m ³ Skin	TWA: 5 ppm TWA: 20 mg/m ³ Skin STEL: 20 ppm STEL: 80 mg/m ³	TWA: 25 ppm TWA: 101 mg/m ³ Skin

Exposure controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection Tight sealing safety goggles.

Hand Protection Gloves made of plastic or rubber.

Body Protection Suitable protective clothing, Gloves made of plastic or rubber, 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, Rubber boots.

Respiratory protection Use only with adequate ventilation.

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

Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water. Local authorities should be advised if significant spillages cannot be contained. Prevent product from entering drains.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

<u>Property</u>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Appearance			
Physical state	: Liquid		
Color	: yellow - brown		
Odor	: Aromatic		
Odor threshold	: No data available		
pH	: 4 - 7		
Melting point/freezing point °C	: -		Not Applicable
Boiling point/boiling range °C	: No data available		
Flash point °C	: 101		
Evaporation rate	: ----		No data available
Flammability (solid, gas)	: Not applicable for liquids		
Upper/lower flammability or explosive limits	: No data available		
Vapor pressure kPa	: -		Not Applicable
Vapor density	: No data available		
Relative density	: 1.01 - 1.04		20 °C
Solubility(ies) mg/l	: -		Not Applicable
Partition Coefficient (n-octanol/water) Log Pow	:		See Section 12 for more information
Autoignition temperature °C	: No data available		
Decomposition temperature °C	: No data available		
Kinematic viscosity mm ² /s 40 °C	: 9.0		
Explosive properties	: Not an explosive		
Oxidizing properties	: Not oxidizing		
Other Information			
Bulk density g/ml	:		Not Applicable
Surface tension mN/m	: 33.5 - 35.3		at 20°C

Section 10: STABILITY AND REACTIVITY

Reactivity

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

Hazardous Decomposition Products

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

Section 11: TOXICOLOGY INFORMATION

Information on toxicological effects

Acute toxicity

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Oral LD50 mg/kg	: > 2000			
Dermal LD50 mg/kg	: > 2000			
Inhalation LC50 mg/l/4h	: > 5.35			
Skin corrosion/irritation	: Irritating to skin			
Serious eye damage/eye irritation	: Irritating to eyes			
Respiratory/skin sensitization	: Skin sensitizer			

Chronic toxicity

Germ cell mutagenicity

Chemical Name
 Propaquizafop : Not classified

Carcinogenicity

Chemical Name
 Propaquizafop : Not Carcinogenic

Reproductive toxicity

Chemical Name
 Propaquizafop : Not toxic for the reproductive system

STOT - single exposure

Chemical Name
 Propaquizafop : No data available

STOT - repeated exposure

Chemical Name
 Propaquizafop : No data available

Aspiration hazard

Chemical Name

Propaquizafop : No data available

Section 12: ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity

Acute toxicity	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Fish 96-hour LC50 mg/l	: 3.2	Rainbow trout		
Crustacea 48-hour EC50 mg/l	: 2.4	Daphnia magna		
Algae 72-hour EC50 mg/l	: 1.2			
Other plants EC50 mg/l	:			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

Propaquizafop : > 2000 Bobwhite quail EPA 71-1

Bees Oral LD50 µg/bee

Chemical Name

Propaquizafop : >20 Apis mellifera Acute oral toxicity Not toxic to bees; Maximum attainable concentration

Persistence and degradability

Abiotic Degradation	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Water DT50 days			
Chemical Name			
Propaquizafop	: 32	EPA-FIFRA 161-2/3	pH 7, 25 °C

Soil DT50 days

Chemical Name

Propaquizafop : < 3 days 20 °C

Biodegradation

Chemical Name

Propaquizafop : Not readily biodegradable OECD 301 B

Bioaccumulative potential

Partition Coefficient	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
(n-octanol/water) Partition Coefficient (n-octanol/water) Log Pow			
Chemical Name			
Propaquizafop	: 4.78	OECD 117	25° C

Bioconcentration factor (BCF)

Chemical Name

Propaquizafop	: 583	(Whole fish)	Low potential for bioaccumulation in aquatic organisms
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Mobility in soil

Adsorption/Desorption Chemical Name	Values	Method	Remarks
Propaquizafop	: 1028.60	OECD 106	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 products	Disposal should be in accordance with applicable regional, national and local laws and regulations.
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. (Propaquizafop, Hydrocarbons, C10-C13, aromatics, <1% naphthalene)
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. (Propaquizafop, Hydrocarbons, C10-C13, aromatics, <1% naphthalene)
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. (Propaquizafop, Hydrocarbons, C10-C13, aromatics, <1% naphthalene)
Hazard Class	9
Packing Group	III
Environmental hazard	Yes
Special precautions for user	
Transport in bulk according to Annex II of MARPOL 73/78 and the	Not Applicable

IBC Code



* 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.

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

H302 - Harmful if swallowed
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H360D - May damage the unborn child
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
EUH066 - Repeated exposure may cause skin dryness or cracking

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
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

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