

Country: RSA, NAM, BOT, ZAM, MOZ
Language: English
Version: 1

SDS Number: 000017
Issue Date: 2026-01-01
Print Date: 2026-02-10

rAgro-Serve encourages you and expects you to read and understand the entire SDS as there is important information throughout the document. This SDS provides users with information relating to the protection of human health and safety at the workplace, protection of the environment and supports emergency response. Product users and applicators should primarily refer to the product label attached to or accompanying the product container.

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

1.1 Product identifier

Product form	Mixtures
Trade name	Karbadust
Registration Number	L0493 & G0196; N-AR0148; W130190
SDS Number	000017

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

1.2.1. Relevant identified uses

Main use category	Insecticide – Plant Protection Product.
Industrial/Professional use spec	Home and Garden.

1.2.2. Uses advised against

Use of the substance/mixture	Insecticide.
See product label for restrictions.	

1.3. Details of the supplier of the safety data sheet

	Agro-Serve (Pty) Ltd 15 Diesel Road, Isando, 1600, South Africa PO Box 1189, Isando, 1600, South Africa
Telephone	+27 861 333 586 08h00 – 17h00 Monday to Friday
Email	info@efekto.co.za
Website	www.efekto.co.za

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
South Africa	Griffon Poisons Centre		082 446 8946	Dr Gerhard H Verdoorn
South Africa	Poisons Information Helpline		0861 555 777	

Spillage

South Africa	Spill Tech		086 100 0366	
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]Mixtures

	Acute toxicity, oral: Category 4: H302 Harmful if swallowed.
	Specific target organ toxicity, single exposure; Respiratory tract irritation: Category 3: H335 May cause respiratory irritation.
	Specific target organ toxicity, single exposure; Narcotic effects: Category 3: H336 May cause drowsiness or dizziness.
	Carcinogenicity: Category 2: H351 Suspected of causing cancer.
	Acute aquatic toxicity: Category 1: H400 Very toxic to aquatic life.
	Chronic aquatic toxicity: Category 1: H410 Very toxic to aquatic life with long lasting effects.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

	
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Hazard pictograms:	GHS09
Hazardous components which must be listed on the label:	• Carbaryl
CLP Signal word:	Warning
Hazard statements:	H410 - Very toxic to aquatic life with long lasting effects.
Precautionary statements:	
General Statement:	P101: If medical advice is needed, have product container or label at hand. P102: Keep out of reach of children. P103: Read carefully and follow all instructions.
Prevention Statement:	P273: Avoid release to the environment.
Response Statements:	P391: Collect spillage.
Storage Statements	P403+P233: Store in a well-ventilated place. Keep container tightly closed.
Disposal Statements	P501: Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

2.3. Other hazards

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Refer to section 11 for toxicological and section 12 for environmental information

SECTION 3: Composition/information on ingredients

3.1. Substances					
		Dusting Powder (DP)			
		Biocidal product			
3.2. Mixtures				According to (EC) 1907/2006 (REACH) amendment Reg. (EU) 2020/878	
Chemical Name	CAS-No.	EC – Number	Conc. % by weight	Classification	Warning Symbols
Carbaryl 1-naphthyl methylcarbamate (Hazard classification of this material is based on the worst possible case)	63-25-2	200-555-0	5.0 %	Acute Tox. 4: H302. Acute Tox. 4 (Inhalation): H332. Carc. Cat. 2: H351. Aquatic Acute 1, H400. Aquatic Chronic 1, H410.	
Talcum powder (Hazard classification of this material is based on the worst possible case)	14807-96-6	238-877-9	95.0 %	Not Classified	
Other ingredients (non-hazardous) to 100%		Balance		100 %	
Further information					
Carbaryl	63-25-2	M-Factor: 100 (acute); 100 (chronic)			
For the full text of the Hazard statements mentioned in this Section, see Section 16.					

SECTION 4: First aid measures

4.1. Description of first aid measures	
General Advice	Have the product container, label or Safety Data Sheet with you when calling a poison control centre or physician, or going for treatment.
First-aid measures after inhalation	Move the victim to fresh air and keep at rest. Call a physician or poison control centre immediately.
First-aid measures after skin contact	Immediately wash with plenty of soap and water for at least 15 minutes. Warm water may increase the subjective severity of the irritation/paresthesia. This is not a sign of systemic poisoning. In case of skin irritation, application of oils or lotions containing vitamin E may be considered. If symptoms persist, call a physician.
First-aid measures after eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Warm water may increase the subjective severity of the irritation/paresthesia. This is not a sign of systemic poisoning. Apply soothing eye drops, if needed anaesthetic eye drops. Get medical attention if irritation develops and persists.
First-aid measures after ingestion	Rinse out mouth and give water in small sips to drink. Do NOT induce vomiting. If swallowed, seek medical advice immediately and show this container or label.
4.2. Most important symptoms and effects, both acute and delayed	
	Temporary blurred vision due to contraction of the pupils (miosis) following contact with the eyes.
4.3. Indication of any immediate medical attention and special treatment needed	
	This product is a cholinesterase inhibitor carbamate.
	The product inhibits cholinesterase resulting in stimulation of the central nervous system, the parasympathetic nervous system, and the somatic motor nerves.
	Do not use oximes such as 2-PAM unless organophosphate intoxication is suspected. Watch for pulmonary edema, which may develop in serious cases of poisoning even after 24-48 hours. At first sign of pulmonary edema, the patient should be placed in an oxygen tent and treated symptomatically. Contraindications: derivatives of morphine.
	The following antidote is generally accepted: atropine.

SECTION 5: Firefighting measures

5.1. Extinguishing media	
5.1.1. Suitable	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
5.1.2. Unsuitable	Water jet.
5.2. Special hazards arising from the substance or mixture	
	Flammable liquid and vapour. Toxic fumes may be released.
5.3. Advice for firefighters	
	Special protective equipment for fire-fighters
	In the event of fire and/or explosion do not breathe fumes. Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.
5.3. Further information	
	Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from firefighting to enter drains or water courses.
5.4. Flash point	
	> 100 °C

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures	
6.1.1. For non-emergency personnel	
Emergency procedures	Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces. Ventilate spillage area. Avoid contact with skin and eyes.
6.1.2. For emergency responders	
Protective equipment	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions	
	Do not allow to enter soil, waterways or wastewater canal.
6.3. Methods and material for containment and cleaning up	
For containment	Collect spillage.
Methods for cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.
Other information	Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	
	Information regarding safe handling, see section 7. Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling	
Precautions for safe handling	Handle and open container in a manner as to prevent spillage. Use only in area provided with appropriate exhaust ventilation. Avoid dust formation.
Hygiene measures	Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics. Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.
7.2. Conditions for safe storage, including any incompatibilities	
Technical measures	Ground/bond container and receiving equipment.
Storage conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a place accessible by authorized persons only. Store in original container. Keep away from direct sunlight. Protect from freezing.
Storage stability	Storage duration: 24 Months
Storage temperature	>0°C <40°C
7.3. Specific end use(s)	
	Refer to the label and/or leaflet.

SECTION 8: Exposure controls/personal protection

Control parameters				
Components	CAS-No.	Exposure limit(s)	Type of exposure limit	Source
Carbaryl	63-25-2	5 mg/m3	TWA	OSHA Z1A
RECOMMENDATIONS IN THIS SECTION ARE FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD SEE THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.				
8.2. Exposure controls				
8.2.1. Appropriate engineering controls		In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.		
8.2.2.1. Hand protection		Chemical resistant nitrile rubber gloves.		
8.2.2.2. Eye protection		Tightly fitting safety goggles.		
8.2.2.3. Skin and body protection		Wear long-sleeved shirt and long pants and shoes plus socks.		
8.2.2.4. Respiratory protection		When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.		
				
8.2.2.5. General protective measures		Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.		
8.2.3. Environmental exposure controls		Avoid release to the environment.		
8.3. Additional emergency measures				
Emergency measure	Emergency measure	Emergency measure	Emergency measure	

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	Emergency shower ISO 3864-1:2011, ISO 3864-4:2011		Eyewash stations ISO 3864-1:2011, ISO 3864-4:2011
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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

1. Physical state	Powder
2. Colour	White to off white
3. Odour	Slight odour
4. Odour threshold	No data available
5. Melting point / Freezing point	Carbaryl melts about 142°C.
6. Boiling point or initial boiling point and boiling range	> 97.8°C
7. Flammability	Product is not flammable
8. Lower and upper explosion limit	Product does not present an explosion hazard
9. Flash point	> 100 °C
10. Auto ignition temperature	No data available
11. Decomposition temperature	No data available
12. pH	4 – 6 % (23 °C)
13. Kinematic viscosity	No data available
14. Solubility in water	Miscible
15. Partition coefficient octanol / water (log value)	No data available
16. Vapour pressure	No data available
17. Density Solubility	1.100 g/ml (20°C)
18. Relative density	No data available
19. Particle characteristics	No data available
9.2. Other information	No additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity	Stable under normal conditions.
10.2. Chemical stability	Stable under recommended storage conditions.
10.3. Possibility of hazardous reactions	No hazardous reactions when stored and handled according to prescribed instructions.
10.4. Conditions to avoid	Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.
10.5. Incompatible materials	Store only in the original container.
10.6. Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
Final acute toxicity classification formulated Product	
LD50 oral rat	LD50 (rat) 2,000 mg/kg
LD50 dermal rat	LD50 (rat)
LC50 inhalation rat (mg/l)	LC50 (Rat) 10 mg/l
Carbaryl	
LD50 oral rat	LD50 (rat) 850 mg/kg
LD50 dermal rat	LD50 (rat) > 2,000 mg/kg
LC50 inhalation rat (mg/l)	LC50 (Rat) 206.1 mg/l
ATE CLP (vapours)	3.200 mg/l/4h
ATE CLP (dust, mist)	3.200 mg/l/4h
Skin corrosion/irritation	Not irritation (Rabbit)
Serious eye damage/irritation	Will irritate eyes.
Respiratory or skin sensitisation	Non-sensitizing. (guinea pig)
STOT-single exposure	This material has been classified as non-hazardous.
STOT-repeated exposure	Carbaryl caused reversible cholinesterase inhibition without long term effects in animal studies.
Aspiration hazard	Harmful if inhaled. Anti-cholinesterase effects. May cause decreased heart rate, low blood pressure, excessive production of bodily secretions, constriction of the airways, increase in the fluid pressure inside the eye and diarrhoea.
Assessment mutagenicity	Carbaryl was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.
Assessment carcinogenicity	Carbaryl caused at high dose levels an increased incidence of tumours in the following organ(s): Liver, Thyroid, Kidney, Cardio-vascular system. The mechanism that triggers tumours in rodents is not relevant for the low exposures encountered under normal use conditions. Listed as a category 3 carcinogen (possibly carcinogenic to humans) by Safe Work Australia. The United States Environmental Protection Agency has classified carbaryl as a Group D, not classifiable as

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	to human carcinogenicity. The International Agency for Research on Cancer (IARC), has also listed it as not classifiable as to human carcinogenicity.
Assessment toxicity to reproduction	Carbaryl did not cause reproductive toxicity in a two-generation study in rats.
Assessment developmental toxicity	Carbaryl did not cause developmental toxicity in rats and rabbits.
Further information	Not applicable.

SECTION 12: Ecological information

12.1. Toxicity	
Ecology - general:	Very toxic to aquatic life with long lasting effects.
Carbaryl	
LC50 fish 1	LC50 (Rainbow trout (<i>Oncorhynchus mykiss</i>)) 1.3 mg/l: 96 h
EC50 Daphnia 1	EC50 (Daphnia magna (Water flea)) 6 µg/l: 48 h
ErC50 (algae)	Scenedesmus quadricauda (Green algae) > 0.60 mg/l; Exposure time: 72 h
Bees LD50 (oral)	1 µg/bee.
Bees LC50 (contact)	1.54 - 26.5 µg/bee
Earthworm LC50 (14 days)	0.5 µg/cm ² - 8.3 µg/cm ²
Birds Oral LD50	Mallard ducks: > 5 000 mg/kg
12.2. Persistence and degradability	
Persistence and degradability	Readily biodegradable.
Koc	624
12.3. Bioaccumulative potential	
Log Pow	Bioconcentration factor (BCF) 44
Bioaccumulative potential	Does not bioaccumulate.
12.4. Mobility in soil	
Ecology - soil	Slightly mobile in soils
12.5. Results of PBT and vPvB assessment	
	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII.
	This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII.
12.6. Endocrine disrupting properties:	
	No additional information available.
12.7. Other adverse effects:	
	No additional information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods	
Additional information	Follow container label instructions for disposal of wastes generated during use in compliance with the product label. Never place unused product down any indoor or outdoor drain.
Waste treatment methods	Dispose of contents/container in accordance with licensed collector's sorting instructions.
Contaminated packaging	Do not re-use empty containers. Place empty container in trash. Follow advice on product label and/or leaflet.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / AND / RID				
ADR	IMDG	IATA	ADN	RID
14.1. UN number				
2757	2757	2757	2757	2757
				
14.2. UN proper shipping name				
Carbamate pesticide, solid, toxic.	Carbamate pesticide, solid, toxic.	Carbamate pesticide, solid, toxic.	Carbamate pesticide, solid, toxic.	Carbamate pesticide, solid, toxic.
Transport document description				
UN 2757 CARBAMATE PESTICIDES, SOLID, TOXIC. (CARBARYL MIXTURE), 6.1, III, (D/E), ENVIRONMENTALLY HAZARDOUS	UN 2757 CARBAMATE PESTICIDES, SOLID, TOXIC. (CARBARYL MIXTURE), 6.1, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 2757 CARBAMATE PESTICIDES, SOLID, TOXIC. (CARBARYL MIXTURE), 6.1, III, ENVIRONMENTALLY HAZARDOUS	UN 2757 CARBAMATE PESTICIDES, SOLID, TOXIC. (CARBARYL MIXTURE), 6.1, III, ENVIRONMENTALLY HAZARDOUS	UN 2757 CARBAMATE PESTICIDES, SOLID, TOXIC. (CARBARYL MIXTURE), 6.1, III, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)				
6.1	6.1	6.1	6.1	6.1

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14.4. Packing group									
III		III		III		III		III	
14.5. Environmental hazards									
Dangerous for the environment : Yes		Dangerous for the environment : Yes Marine pollutant : Yes		Dangerous for the environment : Yes		Dangerous for the environment : Yes		Dangerous for the environment : Yes	

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Registration No. L0493 & G0196; N-AR0148; W130190

This chemical is a registered pesticide product and is subject to certain labelling requirements under law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label.

WHO-classification: III (Slightly hazardous)

Classification according to GHS: Category 4

IRAC Insecticide Group Code: 1A

15.2. Chemical safety assessment Young people under the age of 18 are not allowed to work with the substance.

SECTION 16: Other information

Indication of changes:

Section	Changed item	Change	Comments
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Full text of H- and EUH-statements:

H302	Harmful if swallowed.	H400	Very toxic to aquatic life.
H332	Harmful if inhaled.	H410	Very toxic to aquatic life with long lasting effects.
H351	Suspected of causing cancer.		

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Acute. tox. 4	H302	Calculation method.
STOT SE 3	H335	Calculation method.
STOT Carc. 2	H351	Calculation method.
Aquatic Acute 1	H400	Calculation method.
Aquatic Chronic 1	H410	Calculation method.

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 1	Flammability - 1	Physical Hazard - 1	PPE - 1
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0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Abbreviations and acronyms

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

This safety data sheet provides health and safety information. This product is to be used in applications with best use practice. The product information in this data sheet is to the best of our knowledge correct as at the date of publication. Agro-Serve (Pty) Ltd does not accept responsibility for damage caused by incorrect use of this information.

Training and related advice: This document contains important information to ensure the safe storage, handling and use of this product. It is the responsibility of your organisation to ensure that the information contained in this document is communicated to staff and that all necessary training to enable the product to be used correctly has been given.

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions.

Prepared BY: Nico Lionel van der Westhuis – Technical Support Specialist

SDS EU (REACH Annex II) Update 1 January 2026

End of Safety Data Sheet

Karbadust

Safety Data Sheet

According to (EC) 1907/2006 (REACH) amendment Reg. (EU) 2020/878



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