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SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
The Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

CARBODAN 10 GR

Revision date: 19 September 2024 **Version:** 4 **Supersedes Date:** 14 June 2021

Print date: 19 September 2024

1. Product and Company Identification

Identification of the product/preparation

Product Name	CARBODAN 10 GR
Trade Name/Synonyms	Carbofuran
Registration Number	L7577
Product Description and Formulation Type	A systemic granule carbamate insecticide and nematicide for the control of pests in crops

Active Ingredient
Carbofuran/Carbodan

Formula	$C_{12}H_{15}NO_3$
CAS Number	1563-66-2

Relevant restrictions on use***

THIS REMEDY MAY ONLY BE SOLD TO AND USED BY A REGISTERED PEST CONTROL OPERATOR, OR BY SOMEONE UNDER THE SUPERVISION OF A REGISTERED PEST CONTROL OPERATOR, AND ONLY FOR THOSE USES COVERED BY THE PEST CONTROL OPERATOR'S SCOPE OF REGISTRATION, AND ONLY AS DIRECTED ON THE LABEL.

Supplier, Manufacturer, and/or Importer
Supplier

Company Name	ADAMA SOUTH AFRICA (PTY) LTD
Address	Ground Floor, Simeka House The Vineyards Office Estate 99 Jip de Jager Drive Belville 7530
Phone Number	+27 21 982 1460
Web-Address	www.adama.com

Emergency Phone Numbers Nature of Emergency	Emergency Operator	Telephone Number
24 Hour Poisoning Emergency Helplines – National Advisory Bodies	Griffon Poison Information Centre	+27(0)82 446 8946
	Tygerberg Poison Information Centre:	+27(0)861 155 5777
Spill Response and Transport Incidents	SPILL TECH®	+27 (0)86 100 0366 +27 (0)83 253 6618
Product Properties and Hazards	ADAMA South Africa (Pty) Ltd	+27(0)21 982 1460

Relevant identified uses of the product and uses advised against

CARBODAN 10 GR is a broad spectrum carbamate systemic pesticide that kills insects, mites, and nematodes on contact or after ingestion. The product is for professional use only.
The product should not be used as a seed treatment.

2. Hazard(s) Identification

Classification of the substance or mixture

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.

GHS Classification:

Hazard Class	Category	Hazard Statement Number
Acute Oral Toxicity	3	H301
Acute Inhalation Toxicity	2	H330
Acute Aquatic Toxicity	1	H400
Chronic Aquatic Toxicity	1	H410

Label Elements

Pictograms:

Signal Word:

Danger

Hazard Statements:

Statement Number	Hazard Statement
H301	Toxic if swallowed.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

Prevention -

Statement Number	Precautionary Statement
P260	Do not breathe dust/fumes/mist/vapours/spray.
P264	Wash hands and face thoroughly after handling.
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.
P284	Wear respiratory protection.

Response -

Statement Number	Precautionary Statement
P316	Get emergency medical help immediately.
P320	Specific treatment is urgent. See information in Section 4 of this SDS.
P301 & P316	IF SWALLOWED: Get emergency medical help immediately.
P304 & P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P330	Rinse mouth.
P391	Collect spillage.

Storage -

Statement Number	Precautionary Statement
P405	Store locked up.
P403 & P233	Store in a well-ventilated place. Keep container tightly closed.

Disposal -

Statement Number	Precautionary Statement
P501	Dispose of contents/container to a licensed waste facility and in accordance with local (municipal) and national regulatory requirements.

Other Hazards

Gives off irritating or toxic fumes (or gases) in a fire.

3. Composition/Information on Ingredients

Mixture

Common Name:	CARBODAN 10 GR
IUPAC/Chemical Name:	2,3-dihydro-2,2-dimethylbenzofuran-7-yl methylcarbamate
Chemical Family:	Carbamate
Formulation:	Carbofuran 102g/kg – Granule (GR)

Ingredients with Hazard Concerns (GHS)

According to UN GHS criteria.

Hazardous Component – Chemical Name	CAS Number	Weight - %	International GHS Classification
Carbofuran	1563-66-2	10,2%	Acute Oral Tox. Category 2, H300 Acute Inhalation Tox. Category 2, H330 Aquatic Acute Category 1, H400 Aquatic Chronic Category 1, H410

NOTE: The filler, anti-cacing agent, wetter, carrier, sticker and dye do not cause or contrinute toward the correct GHS classification of CARBODAN 10 G and are therefore, in terms of the South African Hazardous Chemical Agent Regulations 2021; Regulation 14(b), not listed in the table above.

4. First-Aid Measures

Description of First-aid Measures

General Advice

Acute exposure to CARBODAN 10 GR may require decontamination and life support for the victims. Provide this SDS to medical personnel for treatment. Emergency personnel should wear protective clothing appropriate to the type and degree of contamination.
Immediately remove contaminated clothing and remove the affected person from the contamination area. Keep the person warm, calm and covered up. First Aid personnel should pay attention to their own safety.

Eye Contact

Immediately rinse/flush the eyes gently with water from the eye wash fountain for several minutes (at least 15 minutes), while holding the eyelids apart. Check for and remove contact lenses if easy to do so. Continue rinsing. Obtain medical attention if irritation occurs and persists.

Skin Contact

Remove all contaminated clothing and shoes. Rinse the skin immediately with plenty of water for 15 to 20 minutes under the safety shower. Contact a poison control centre or medical practitioner if irritation occurs or persists. Wash contaminated clothing before re-use.

Inhalation

Immediately remove the affected victim from exposure to an area with fresh air. If breathing is difficult have qualified personnel administer oxygen. If breathing has stopped, administer artificial respiration. Do not use mouth-to-

	mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Obtain immediate medical attention.
Ingestion	Obtain immediate medical attention - call a poison control centre or medical practitioner immediately for treatment advice. If conscious, rinse mouth thoroughly with water. Never give anything by mouth to an unconscious or convulsing person. Do not induce vomiting unless directed to do so by a medical professional. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomits, rinse mouth and administer more water.
Emergency Responders	Use Personal Protective equipment as required.

Most important symptoms/effects, acute and delayed

Acute health effects: Symptoms of exposure to the product could include weakness, sweating nausea and vomiting, abdominal pain and blurred vision. High levels of exposure could cause muscle twitching, loss of coordination and may cause breathing to stop.
Long-term effects: Carbofuran may affect the nervous system.

Indication of any immediate medical attention and special treatment needed

Notes to physician:

Carbodan is a potent, rapidly reversible cholinesterase inhibiting pesticide.
Antidote for carbamate poisoning: repeated doses of Atropine Sulphate. Symptoms of lung oedema may not appear for several hours.

Do not give morphine, aminophylline, phenothiazines, reserpine, furosemide, or ethacrynic acid. Drugs like 2-Pam are not effective in poisoning with Carbofuran, and should not be used.
Treat symptomatically and supportively.

Specific treatments:

Establish clear airway and tissue oxygenation by aspiration of secretions, and if necessary, by assisted pulmonary ventilation with oxygen. Improve tissue oxygenation as much as possible before administering the antidote to minimise the risk of ventricular fibrillation. The following antidote is recommended - give atropine sulphate 2–4 mg (adult) applied intravenously, repeated by 10 minute intervals until atropinization (dry, flushed skin and tachycardia) appears. Maintain atropinization by repeated doses for 2 – 12 hours, or longer, depending on the severity of poisoning. Pralidoxime (2-PAM, Protopam) and other oximes are contra-indicated.

5. Fire-Fighting Measures

Suitable (and unsuitable) extinguishing media	Use dry chemical, carbon dioxide, water spray, or foam. Contain fire control water for later disposal. Do not use high volume water jets due to potential contamination.
Specific hazards arising from the chemical including thermal decomposition products	Fires involving the product may produce irritating or poisonous vapours (toxic oxides of nitrogen, carbon monoxide, etc.), mists or other products of combustion. Containers may explode in heat of fire.

Special protective equipment and precautions for fire-fighters	Firefighters must wear emergency equipment including positive pressure self-contained breathing apparatus with a full-face mask. Remove unaffected containers from fire area if possible.
Additional provisions	Stay at maximum distance. Act in accordance with the site's Internal Emergency Plan and the Workplace Specific Procedures for actions to be taken after an accident or other emergencies. Keep container cool by spraying with water.

6. Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures	Do not breathe in dust/fumes/vapour and avoid contact with eyes, skin and clothes. Evacuat personnel to a safe area when necessary. Ventilate the area of the spill or leak, especially when in confined areas. Do not touch or walk through spilled material as it could be slippery when spilt. Contain spills if it can be done without risk and clean-up immediately. Wear appropriate protective clothing recommended in Section 8 of the SDS.
Environmental precautions	Prevent spillage or further leakage if safe to do so. Do not allow the spilt product to enter water courses and drains and avoid contact with soil. Do not allow the spilt product to spread to other areas - keep the spilt material contained and isolated. Report spills and releases as required to appropriate authorities if the spilt product has caused environmental pollution (sewers, water ways, soil or air).
Methods for cleaning up	***For small spills***, sweep up with damp absorbent material. Place into a labelled waste container with a shovel and cover for subsequent disposal. Dispose of collected spilt material as hazardous waste. Clean the contaminated surface with water to remove any residues of the spilt product. Keep the wash water out of drains, sewers and waterways. ***For large spills***, do not wash away into sewers. Avoid creating dusty conditions and prevent wind dispersal. Cover powder spill with plastic sheet or tarp to minimize spreading (if solid/powdered product). Contain and collect spilt product in suitable containers for proper disposal.
Reference to other SDS sections	See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

7. Handling and Storage

Precautions for safe handling	Always provide good ventilation in the work area. Avoid the generation of dust. Highly toxic product and therefore prevent contact with eyes,

prolonged contact with skin and clothing. Do not breathe in dust or vapours.
Wear protective clothing and equipment during handling as described in Section 8 of the SDS. Do not eat or drink during use. Wash the hands and face thoroughly with soap after handling. Keep containers closed when not in use. Do not permit smoking in use or storage areas.
Locate emergency showers and eye-rinsing facility near the work/handling area. Maintain good normal industrial hygiene and housekeeping practices in areas where the product is used/handled.
Remove contaminated clothing immediately if the product gets inside. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of work area and work clothing is recommended.
Keep unprotected persons away from the area where the product is being applied.

Conditions for safe storage, including any incompatibilities

The entrance to storage facilities should be granted only to appropriately trained personnel. Always store locked up and keep containers tightly closed when not in use. Store only in properly labelled containers. Check storage containers regularly for leaks.
The formulation is stable if stored well ventilated, out of direct sunlight, cool and free of moisture and high humidity. Keep out of reach of children, uninformed persons and animals. Protect containers from physical damage and check the condition of storage containers periodically. Do not contaminate water, food, or feed by storage or disposal.
Avoid cross contamination with other agricultural products.
Store away from incompatible materials like acids, alkalis and strong reducing agents.
It is recommended to have appropriate spill control kits equipped with absorbent material in close proximity to storage areas (see Section 6).
Store in accordance with national and local regulations.

8. Exposure Controls and Personal Protection

Components with workplace control parameters – National Occupational Exposure Limits

This product, as supplied, contains Carbofuran for which an occupational exposure limits has been established by the South African Department of Labour and Employment. The South African exposure limits for air borne and respirable dust are also included due to the granulated form of the product and its Silica Sand and Synthetic Silica content.

Component	Type	Control Parameter	Update	Basis
Carbofuran	OEL-eight hour TWA	0.2mg/m^3	2021	South African RELs*
Total Air Borne Dust	OEL-eight hour TWA	10mg/m^3	2021	South African RELs*
Total Respirable Dust	OEL-eight hour TWA	5mg/m^3	2021	South African RELs*

*REL:	Recommended Exposure Limit.
OEL-eight hour TWA:	Occupational Exposure Limit- Time Weighted Average. Calculated over an eight-hour working day, for a five-day working week.

Appropriate engineering controls

Use with general or adequate local exhaust ventilation to maintain airborne concentrations and exposure below occupational exposure limits. Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal Protective Equipment

Respiratory protection:

Respiratory protection selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Recommended – appropriate and properly fitting dust-protection mask (e.g. FFP2/3). In operations where exposure levels are exceeded, an approved respirator (full face mask) with a particulate filter and an organic vapour cartridge or supplied air respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration.
For emergency conditions, use an approved positive-pressure self-contained breathing apparatus.

Skin and hand protection:

Select skin and hand protection based on the task being performed and the risks involved with the task.
Elbow length impervious chemical resistant gloves recommended for hand protection (e.g. butyl rubber, nitrile rubber, etc.). Consider the glove penetration time - information on glove penetration time is available from the manufacturer of the glove. The gloves should be replaced immediately in case of damage or signs of wear. It is recommended to use preventative skin protection (skin cream).
Impervious coveralls, apron, shoes and socks as required to prevent skin contact and contamination of personal clothing. Overalls must be buttoned to the neck and sleeves worn over the gloves.

Eye/face protection:

Safety eyewear compliant with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
Due to the inhalation and oral toxicity of the product, a full face respirator is recommended.

General safety and hygiene measures:

Handle the product in accordance with good industrial hygiene and safety practice.
An eye wash fountains and safety showers should be available and easily accessible.
Avoid contact with the skin, eyes and clothing and immediately remove all contaminated clothing.
Do not breathe the dust.
Keep the product away from food, drink and animal feeding stuffs.
Wash the hands and/or face before breaks, eating, smoking or using the lavatory and at the end of the shift/working period.

Environmental exposure controls	In accordance with the local legislation for the protection of the environment it is recommended to avoid environmental spillage or releases of both the product and its container.

9. Physical and Chemical Properties

Unless otherwise stated, the data is applicable to the formulation.

Physical or Chemical Property		Value	Test Method or Remarks
Appearance	Appearance/physical state	Granular solid	
	Odour characteristics	Odourless – faint phenolic	
	Colour	Purple - Blue	
Volatility	Boiling point (°C)	200°C	Carbofuran
	Vapour pressure (Pa)	Not determined	
	Evaporation Rate at 20 ºC	Not determined	
Product Description	Solubility in water (g/L at 25 °C)	0.70	Slightly soluble in water.
	Decomposition temperature (°C)	276°C	Carbofuran - boiling with partial decomposition.
	Melting point (°C)	153°C -154°C	Carbofuran
	pH	7,8 - 8,8	At 10 % (23 °C).
	Density (g/cm^3)	1.8 - 2.2 (20°C)	
	Bulk Density/relative density (g/L)	1.45	
	Particle characteristics	0.5 – 0.8 mm	
Flammability	Flammable (Y/N)	Not flammable	
	Flash point (°C)	Not expected to self-ignite	
	Flammable limits-LEL	Not applicable - solid	
	Auto-ignition Temperature (°C)	Not applicable - solid	

Other Hazard Information

None

10. Stability and Reactivity

Reactivity	The product is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. Decomposes at elevated temperatures.
Chemical Stability	Hazardous polymerization will not occur. Stable under normal ambient conditions of use, storage and transport. Unstable in alkaline media.
Possibility of Hazardous Reactions	None known under conditions of normal use.
Hazardous Decomposition Products	Does not decompose when used for intended uses. Can decompose under fire or during burning and at high temperatures releasing toxic oxides of nitrogen.

Conditions to Avoid

Shock and Friction	Contact with Air	Heat and Ignition Sources	Sunlight	Humidity or Moisture Conditions
Not applicable	Avoid storage without ventilation.	Avoid exposing to excessive heat.	Do not store in direct sunlight.	Avoid moisture conditions during storage.

Incompatible Materials

Incompatable with:

Strong Acids	Water	Combustive Materials	Strong Alkalis	Other Incompatible Substances
Yes	Not applicable	Not applicable	Yes	Avoid strong reducing agents like hydrides.

11. Toxicological Information

Information on likely routes of exposure

The substance is toxic by ingestion and fatal if inhaled. The product is moderately toxic by dermal absorption.

Information on toxicological effects

Acute toxicity:

Product Information	Fatal	Toxic	Harmful	May be Harmful	Not classified
Ingestion - Oral		√			
Dermal/Skin Contact					√

Inhalation √

Assessment of acute toxicity:

Product/ingredient Name	Dose Acute -	Species	Test Result
Carbofuran	78.4mg/kg	Rat	$ATE_{(MIX)}$ Oral
Carbofuran	>2000mg/kg	Rat	LD_{50} Dermal
Carbofuran	0.41mg/L	Rat (4h)	$ATE_{(MIX)}$ Inhalation ***(Dust/Mist)***

Irritation –Dermal/Skin and Eyes:
Assessment of irritation effects (skin/eyes):
Based on available data, the classification criteria are not met.

Respiratory/Skin Sensitization:
Assessment of sensitization:
Based on available data, the classification criteria are not met.

Germ cell mutagenicity:
Assessment of mutagenicity:
Based on available data, the classification criteria are not met.

Carcinogenicity:
Assessment of carcinogenicity:
Carbofuran does not appear to possess mutagenic activity and was negative in both rat and mouse oncogenicity assays. Carbofuran is classified as a "Not likely" human carcinogen based on the lack of evidence of carcinogenicity in mice or rats.
Based on available data, the classification criteria are therefore not met.

Reproductive toxicity:
Assessment of reproduction toxicity:
Based on available data, the classification criteria are not met.

Developmental toxicity:
Assessment of teratogenicity:
Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure):
Assessment of STOT (single):
Based on available data, the classification criteria are not met.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure):
Assessment of repeated dose toxicity:
Based on available data, the classification criteria are not met.

Aspiration hazard:

Assessment of repeated dose toxicity:
Based on available data, the classification criteria are not met.

Symptoms related to the physical, chemical and toxicological characteristics	The primary toxic effect following Carbofuran exposure is neurotoxicity resulting from inhibition of the enzyme acetylcholinesterase (AChE). Carbofuran inhibits the AChE activity in the body.
Delayed and immediate effects as well as chronic effects from short and long-term exposure	Early symptoms of poisoning may include headache, weakness, giddiness and nausea. Later there may be perspiration, stomach pains, blurred vision, excessive salivation, slurred speech, and muscle twitching, tremor, diarrhoea and vomiting. Toxic symptoms occur at a small fraction of the lethal dose. Recovery from a mild toxic exposure is rapid. Since the compound acts rapidly, terminating exposure as soon as initial symptoms appear may prevent a severe intoxication. Prolonged or repeated exposure to Carbofuran may cause the same effects as an acute exposure.

12. Ecological Information

Ecotoxicity
CARBODAN 10 GR is very toxic to aquatic life with long lasting effects.

The information below refers to Carbofuran

Species and Genus	Exposure (hours/days)	Result in fresh water
Crustacea (Daphnia magna)	48h	Acute EC_{50} 0.20mg/L
Fish (Rainbow Trout)	96h	Acute LC_{50} 2.8mg/L
Algae and aquatic plants	72 or 96 h	No data available

Toxicity to Other Species
Birds: Highly toxic to birds.
Fish: Highly toxic to many fish.
Bees: Not toxic to bees in the granular formulation.
Carbofuran is considered to be highly toxic to freshwater and estuarine/marine invertebrates on an acute basis. Chronic tests showed reproductive effects.

Other Environmental and Adverse Effects:

Environmental effect	Environmental Effect Applicable to Ingredient	Description

Persistence and degradability:	Carbofuran	Carbofuran is of moderate persistence in soil, with a reported field half-life of 30 - 120 days. It degrades by chemical, photochemical, and microbial processes. Hydrolysis is more rapid in alkaline conditions. Carbofuran breaks down in sunlight.
Bioaccumulative potential:	Carbofuran	Carbofuran has a low potential for bioaccumulation as it has a BCF of 12 L/kg (estimation based on a calculation method).
Mobility in soil:		Carbofuran has a high potential for leaching into groundwater. It is mobile in sandy loam, silty clay, and silty loam soils.
Other adverse effects:		Toxic to algae.

13. Disposal Considerations

Waste handling and disposal

Avoid and minimize the generation of waste.
Dispose product related waste in accordance with all local regulations and prevent the contamination of water, food, or feed by storage or disposal of the waste. Do not use empty containers for any other purpose. The product or empty containers must not be disposed of as part of general waste.
Special help is available for the disposal of Agricultural Chemicals. The product label will supply general advice regarding disposal of small quantities, and how to cleanse containers.

General container handling

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Empty containers and offer for recycling, if an available option. Recondition if appropriate, or puncture and dispose of in a hazardous waste landfill, or by other procedures approved by the local authorities.
Contaminated packaging: Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

Additional special precautions

The product and its container must always be disposed of in a safe manner.
Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

14. Transport Information

Land Transport **Inland** **See Transport** **Air Transport**

	(ADR/RID)	Waterways (AND/ADNR)	(IMDG)	(ICAO-TI/IATA-DGR)
UN Number	2757	2757	2757	2757
UN Proper Shipping Name	CARBAMATE PESTICIDE, SOLID, TOXIC (10.2% Carbofuran)	CARBAMATE PESTICIDE, SOLID, TOXIC (10.2% Carbofuran	CARBAMATE PESTICIDE, SOLID, TOXIC (10.2% Carbofuran	CARBAMATE PESTICIDE, SOLID, TOXIC (10.2% Carbofuran
Transport Hazard Class	6.1	6.1	6.1	6.1
Transport Hazard Class Pictogram				
Transport Subsidary Class				
Packaging Group	I	I	I	I
Environmental Hazard	Yes	Yes	Yes	Yes
Special Precautions for User	-	-	Marine pollutant	Quantity limits on aircraft – 5kg for passenger and 50kg fro cargo.

15. Regulatory Information

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

Symbol

T+: Very toxic

R- Phrase Number	R Phrase
R26/28	Very toxic by inhalation and if swallowed.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

No known specific country national and/or local regulations applicable to the product (including its ingredients). A summary of country specific general laws/regulations are supplied below.

Country Specific Registration Requirements

COUNTRY	LEGAL REFERENCE	ASPECTS COVERED
South Africa	Fertilizer, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act 36 of 1947)	Registration to manufacture or sell an agricultural remedy.

Country Specific Pesticide Handling and Storage Safety

COUNTRY	LEGAL REFERENCE	ASPECTS COVERED
South Africa	SANS10206: 2020.	The Handling, Storage and Disposal of Pesticides.

Country Specific Safety Data Sheet and Occupational Exposure Limit Requirements

COUNTRY	LEGAL REFERENCE	ASPECTS COVERED
South Africa	Regulations for Hazardous Chemical Agents – 2021 – SA Occupational Health and Safety Act.	Handling, labelling and Safety Data Sheets for hazardous and GHS classified substances and mixtures. Occupational Exposure Limits.
	SANS11014:2010.	Safety Data Sheet for Chemical Products – Content and Order of Sections.

Country Specific control of handling of poisonous/hazardous and non-poisonous/non-hazardous substances/chemicals in industry and the workplace

COUNTRY	LEGAL REFERENCE	ASPECTS COVERED
South Africa	**Hazardous Substances Act,** 1973 (Act No.15 of 1973).	Requirements on the prohibition and control of the importation, manufacture, sale, use, operation, application, modification, disposal or dumping of **hazardous substances.**
	Occupational Health and Safety Act No. 85 of 1993.	Occupational Health and Safety Standards for employers and users working with and around hazardous chemical substances.

16. Other Information

Key to Abbreviations

AND	European Provisions concerning the International Carraige od Dangerous Goods by inland Waterways
ADR	The European Agreement concerning the International Carraige of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
CAS Number	Chemical Abstracts Service Number
COD	Chemical Oxygen Demand
GHS	Globally Harmonised System of Classification and Labelling of Chemicals
IATA	International Air Transport Association
ICAO	International Civil Aviation Organisation
IMDG	International Maritime Dangerous Goods
Log_{Pow}	Logarithm of the octanol/water partition coefficient

LD_{50}	Lethal Dose 50
LC_{50}	Lethal Concentration 50
RID	The Regulations concerning the International Carraige of Dangerous Goods by Rail
SDS	Safety Data Sheet
STOT	SpecificTarget Organ Toxicity
TWA	Time Weighted Average
UN	United Nations

Document Control

Date of preparation of the SDS	20 May 2014
Revision date	19 September 2024
Revision Note	Changes made to the last version are labelled with the sign ***. NOTE: Previous revision incorporates the GHS requirements for CARBODAN 10 GR and therefore the total content of the SDS has been revised.

The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Classification of the Mixture - Classification Procedure

H Statement Number	H Statement	Classification Basis: Test Data/Calculation Method
H301	Toxic if swallowed.	Calculated
H330	Fatal if inhaled.	Calculated
H400	Very toxic to aquatic life.	Data for technical product
H410	Very toxic to aquatic life with long lasting effects.	Data for technical product

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