

Sharda International Africa (Pty) Ltd

(Co. Reg. No. 2010/002268/07)
P.O. Box 82021, Southdale, 2135, South Africa.

Tel: 031 764 3011

Email: rsa.regn@shardaintl.com, Website: <http://www.shardaintl.com>

SECTION 1. Chemical product and company identification

Product identifier:

Identification as on the label/Trade name: Curadan

Additional information: Carbofuron

Relevant identification uses of the substance and uses advised against:

Identified uses: Insecticide

Uses advised against: Use only as directed.

Details of the supplier of the Safety Data Sheet:

Company name: Sharda International Africa (Pty) Ltd

Address: P.O. Box 82021, Southdale, 2135

Phone number.: 031-764-3011

Emergency telephone numbers:

UNITAS Hospital: 0800-111-9900

Tygerberg Hospital: 021-931-6129

Netcare 911: 082911

SECTION 2. HAZARD IDENTIFICATION

Classification of the substances or mixture

The mixture is classified according to

SANS 10234:2008, Regulation EC 1272/2008 [EU-GHS/CLP]	
Hazard classes/Hazard categories	Hazard statement
Acute toxicity oral	H302 Harmful if swallowed
Eye irritation / eye damage	H318 Causes serious eye damage

For full text of H statements see section 16

The most important adverse effects

The most important adverse physiochemical effects: None.

The most important adverse human health effects: Harmful if swallowed. Causes serious eye damage

Label elements



Hazard pictograms:

Signal Word: Danger

Hazard Statements: H302 Harmful if swallowed. H318 Causes serious eye damage.

Precautionary Statements: P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P280 Wear eye protection/face protection. P301 + P312 + P330 If swallowed: Call a Poison control centre / doctor if you feel unwell. Rinse mouth. P305 + P351 + P338 + P310 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a Poison Centre / doctor P501 Dispose of contents / container to an approved waste disposal plant.

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Special labelling of certain mixtures: None

Other hazards: None

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Ingredients:

Substance name (IUPAC/EC)	CAS –No.	Concentration % by weight	Classification
			EC1272/2008

For full text of H statements see section 16

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4. FIRST AID MEASURES

Description of first aid measures:

In case of inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

In case of skin contact:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

In case of eye contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

In case of ingestion:

Give a slurry of activated charcoal in water to drink, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed:

Inhalation: Fatal if inhaled

Ingestion: Fatal if ingested

Skin contact: Fatal in contact with skin

Eye contact: None known

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Indication of any immediate medical attention and special treatment needed:

Immediate medical attention is required if exposure to the product. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

SECTION 5. FIRE -FIGHTING MEASURE

Extinguisher media:

Suitable extinguisher media: Water, water fog or foam

SMALL FIRE: See above.

LARGE FIRE: See above.

Unsuitable extinguishing media: Water jet.

Specific hazards arising from the mixture:

No information

Special firefighting procedures:

Remove spectators from surrounding area. Isolate the fire area and evacuate all personnel downwind of the fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Keep upwind. Avoid inhaling hazardous vapours and fumes from burning materials. Remove container from fire area if possible and without risk. Do not use high volume water jet, due to contamination risk. Do not scatter the burning material. Water can be used to cool unaffected containers but must be contained for later disposal. Contain fire control agents for later disposal. Avoid pollution of waterways by run-off from the site.

Advice for fire-fighters:

Wear NIOSH/MSHA approved self-contained breathing apparatus and full protective gear. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6. ACCIDENTAL RELEASE

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: Splash goggles, gloves

For emergency responders: Splash goggles, gloves

Protective equipment:

Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill.

Emergency procedures:

Alert fire-fighting personnel, evacuate unprotected personal and animals

Environmental precautions:

Prevent entry into sewers, basement or confined area; die if needed. Call for assistance on disposal

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Methods and materials for containment and cleaning up:

For small spills: Contain spilled material if possible. Collect in suitable and properly labelled containers. Absorb with materials such as: sand, earth, vermiculite or diatomaceous earth

For large spills: Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in well labelled container for disposal according to local regulations.

Reference to other sections:

See section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See section 13 for information on disposal.

Additional information: None.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:

Protective measures: Observe directions on label and instructions for use.

Advice on general occupational hygiene: Do not eat drink or smoke when handling this product.

Conditions for safe storage, including incompatibilities:

Store product in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use.

Incompatible substances:

None known

Specific end uses:

Use as directed. Use original container

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control parameters:

Occupational exposure limits (OEL): None known

Biological exposure indices (BEI): None known.

Additional exposure limits under the conditions of use: None known.

Exposure control:

Appropriate engineering controls:

Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

Hygiene measures:

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location

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Respiratory protection:

Is required under normal use; use an approved air-purifying respirator.

Hand protection:

Use chemical resistant gloves. Examples of preferred glove barrier materials include Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, Polyvinyl alcohol, Polyvinyl chloride.

Eye/face protection:

Use safety glasses. If there is a potential for exposure to vapour which could cause eye discomfort, wear chemical goggles.

Skin and body protection:

A lab coat is required when handling this product.

Environmental exposure controls: Prevent product from entry into sewers and water courses

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance:	Bright blue, Granular
Odour:	Mild Pungent odour
pH (1% aqueous dilution):	No information available
Melting point:	No information available
Freezing Point:	No information available
Boiling Point:	No information available
Flash Point:	No information available
Flammability:	No information available
Upper/lower explosion limits:	No information available
Vapour Pressure (mm Hg):	No information available
Relative Vapour Density:	No information available
Density:	No information available
Solubility:	No information available
n-octanol/water partition coefficient:	No information available
Auto-ignition temperature:	No information available
Decomposition temperature:	No information available
Viscosity:	No information available

SECTION 10. STABILITY AND REACTIVITY

Reactivity: The product is stable under normal conditions

Chemical stability:

Stable under normal storage conditions for 2 years

Possibility of hazardous reactions:

When heated strongly it melts and decompose releasing toxic fumes. Violent reaction or explosion may occur in cases of confinement of the product.

Conditions to avoid: None

Incompatible materials: Incompatible with strong acids or alkali and strong oxidizers.

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Hazardous decomposition products: Carbon monoxide and carbon dioxide.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects:

Carbofuran	
Acute oral LD ₅₀ (male and female rat)	c. 8
Acute oral LD ₅₀ (dog)	15
Acute oral LD ₅₀ (mice)	14.4
Acute dermal LD ₅₀ (24 h male and female rats)	>2000 mg/kg
Acute inhalation LC ₅₀ (4h) (rats)	0.075 mg/ℓ air (aerosol)
Skin irritation/ corrosion (rabbits)	Mildly irritating to skin
Eye damage / irritation (rabbits)	Mildly irritating to eye
Respiratory or skin sensitization (guinea pigs)	
Germ cell mutagenicity	
Carcinogenicity	
Reproductive toxicity	
Specific Target Organ Toxicity STOT single exposure	
Specific Target Organ Toxicity STOT repeated exposure	
Aspiration hazard	

SECTION 12. ECOLOGICAL INFORMATION

Anticipated behaviour of the chemical product in the environment /possible environmental impact/ecotoxicity:

Carbofuran	
Acute toxicity	
Birds:	
Acute oral LD ₅₀ for Japanese quail	>2.5 – 5 mg/kg
LC ₅₀ Japanese quail (as GR5)/kg	60 - 240 mg
Tech LC ₅₀	0.7-8 mg/kg depending on species
Fish:	
LC ₅₀ (96 h) for rainbow trout	22-29 mg
Bluegill sunfish	1.75 mg
Golden orfe	107-245 mg (as GR5)/ℓ
Tech:LC ₅₀	7.3-362.5 µg/ℓ, depending on species
Daphnia	
EC ₅₀ (48 h)	38.6 µg/ℓ
Bees	Toxic to bees (except for granular formulation)

Environmental fate:

Plant: Carbofuran is quickly metabolised into 3-hydroxycarbofuran and ketocarbofuran.

Soil/Environment: DT50 in soil c. 30-60 d. Most important metabolite is CO₂ formed by microbiological degradation of the phenol compounds. Koc 22.

Persistence and degradability: No information available.

Bioaccumulative potential: No information available.

Mobility in soil: No information available.

Results of PBT& vPvB assessment: No information available.

Other adverse effects: No information available.

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SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

General Information: Do not discharge into drains, water courses or onto the ground. Discharge, treatment or disposal may be subject to national, state, or local laws. Empty containers may contain product residues. Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product cannot be reused or re-processed. Never pour untreated waste or surplus product into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers. Comply with local legislation applying to waste disposal. The product may be taken to a registered waste disposal site or incineration plant.

Disposal Methods: Destroy the container by perforating and flattening and dispose of through an approved waste dump site, incineration plant or recycling company.

Container: Since emptied containers retain product residue, follow label warnings even after container is emptied.

Product/ packaging disposal:

Treat as hazardous waste and dispose of in accordance with municipal, provincial and national regulations.

SECTION 14. TRANSPORT INFORMATION

UN Number: 2757
Un proper shipping name CARBAMIDE PESTICIDE SOLID, TOXIC
UN Classification transport hazard class(es): 6.1
Packing group (if applicable) III
Marine pollutant (Y/N) Yes, Considered a marine pollutant
Transport in bulk according to MARPOL 73/78, Annex II and the IBC Code: Not available

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture:

Relevant information regarding authorization: Occupational Health and Safety Act 1993 Regulation for Hazardous Chemical Substances.

Relevant information regarding restrictions:

EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP] and EU directives 67/548/EEC or EC 1999/45/EC

Other National regulations: National Road Traffic Act, 1996 (ACT NO. 93 of 1996).

SANS 11014:2010 – Safety data sheet for chemical products, Content and order section

SANS 10228:2012- The identification and classification of dangerous goods for transport by road and rail modes.

National Environmental Management: Waste Act 59 of 2008.

Chemical Safety Assessment carried out? No

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SECTION 16. OTHER INFORMATION

Indication of changes:

GHS aligned

Relevant classification and H statements (number and full text):

H302 Harmful if swallowed

H318 Causes serious eye damage

Training instructions:

Use as indicated on the label, special training may be required for application.

Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Notice to readers:

To the best of our knowledge, the information contained herein is accurate and is based on the present state of our knowledge and does not therefore guarantee specific properties. However, neither the above-named supplier nor any of its subsidiaries assumes any liability whatsoever for any accuracy or completeness of the information contained herein.

Final determinations of suitability of any material are sole responsibility of the users, who must take responsibility for observing existing laws and regulations. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.