



## SECTION 1 - PRODUCT & COMPANY IDENTIFICATION

ARYSTA LifeScience South Africa (Pty) Ltd  
Co. Reg. No.: 2009/019713/07  
7 Sunbury Office Park,  
Off Douglas Saunders Drive,  
La Lucia Ridge, South Africa, 4019

Tel: 031 514 5600  
Fax: 031 514 5611

e-mail: [info@arysta.co.za](mailto:info@arysta.co.za)  
Web address: [arystalifescience.co.za](http://arystalifescience.co.za)

**Substance:** cartap hydrochloride  
**Product Name:** **CARTAP**  
**Product Use:** Insecticide  
**Creation Date:** January 2011  
**Revision Date:** August 2019

### 24 Hr Emergency Number:

#### In case of Poisoning:

Poisons Helpline 0861 555 777

#### In case of Spillage:

Spill Tech Oil & Chemical Pollution Control 086 100 0366 / 083 253 6618

## SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

**Common Name:** cartap hydrochloride

**Chemical Name:** S,S'-(2-dimethylamino-trimethylene) bis(thiocarbamate) (IUPAC)

**CAS No.:** 15263-53-2

**Chemical family:** 2-dimethylaminopropane-1,3-dithiol

**Chemical formula:** C<sub>7</sub>H<sub>16</sub>CIN<sub>3</sub>O<sub>2</sub>S<sub>2</sub>

**Molecular weight:** 273.8

**Use:** Systemic insecticide with stomach and contact action. Insects discontinue feeding, and die of starvation.

**Formulation:** cartap hydrochloride 500 g/kg Soluble powder

**Hazardous ingredients:** Hazard/Risk: % present: cartap hydrochloride Xn, N 50 % filler - 50 %

**Symbol:** Xn, N

**Indication of danger:** Harmful, Environmentally

Hazardous Substance

**Risk Phases:** R21, R22, R51

## SECTION 3 - HAZARD IDENTIFICATION

### Toxicity class:

WHO (a.i.) II

### Likely routes of exposure:

Ingestion, skin and eye contact.

### Main hazard:

Cartap is moderately toxic to mammals on acute exposure by several routes of administration.

In case of accidental poisoning, diarrhea, nausea, vomiting, abdominal pain, sweating, salivation and blurred vision are reported. In severe poisonings, possibility of respiratory depression, pulmonary oedema and convulsions should be anticipated.

## SECTION 4 - FIRST AID MEASURES AND PRECAUTIONS

### Inhalation:

Move the victim to fresh air or remove source of contamination. Keep the person warm and at rest. Treat symptomatically and supportively as and when required. Qualified personnel should perform administration of oxygen. Get medical attention immediately.

### Skin contact:

Move the victim from the source of contamination and remove all contaminated clothing, shoes and leather goods. Gently wipe off excess chemical. Wash affected skin areas gently and thoroughly with water and nonabrasive soap, for at least 15 to 20 minutes. Do not rub the skin. If irritation persists, seek medical advice.

## MATERIAL SAFETY DATA SHEET

Issued by: Arysta Lifescience South Africa  
Poisons Helpline 0861 555 777

Phone: 031 514 5600  
Spillage Helpline (Spill Tech) 086 100 0366



**Eye contact:**

Immediately flush the contaminated eyes with gently flowing clean water for 15 to 20 minutes, occasionally lifting the upper and lower lids. Seek medical advice.

**Ingested:**

**Do not induce vomiting.** Never give anything by mouth to an unconscious person. Obtain medical attention immediately. Qualified medical personnel should perform administration of oxygen. If the person is alert, rinse mouth thoroughly with water and give person glass of water to drink.

**Advice to physician:**

Administer cystine as antidote. Consider washing of the stomach with injections of water. Treat symptomatically and supportively.

---

**SECTION 5 - FIRE-FIGHTING MEASURES**

---

**Extinguishing agents:**

Use carbon dioxide, dry powder, or alcohol-resistant foam to extinguish fire. Water spray can be used for cooling of unaffected stock, but avoid water coming in contact with the product. Apply water as a fine mist or fog.

**Fire fighting:**

Remove spectators from surrounding area. Isolate the fire area and evacuate downwind. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Contain fire control agents for later disposal. Avoid inhaling hazardous vapours. Keep upwind. Remove container from fire area if possible and without risk. Dyke fire control water for later disposal. Do not scatter the material. Avoid pollution of waterways. Product is considered a Marine Pollutant. Do not use high volume water jet, due to contamination risk. Contain water used for fire fighting for later disposal. Avoid the accumulation of polluted run-off from the site.

**Personal protective equipment:**

Fire fighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus with full-face mask.

---

**SECTION 6 - ACCIDENTAL RELEASE MEASURES (SPILLAGE)**

---

**Personal precautions:**

Do not inhale dust. Avoid contact with skin and eyes. Ventilate area of spill or leak, especially confined areas. Wear appropriate safety clothing and eye/face protection - see Section 8.

**Environmental precautions:**

Do not allow entering drains or watercourses. Spillage or uncontrolled discharges into water courses (or public waters) to be reported immediately to the Police and to the Department of Water/Environmental Affairs. Product is considered a Marine Pollutant.

**Occupational spill:**

For dry spills, shovel up and sweep up with damp earth or sand or other suitable absorbents, taking care not to raise a dust cloud. Place the material into a labelled, clean, dry container and store in a safe place to await proper disposal. All contaminated cleaning materials should be placed in closable receptacles. In situations where product comes in contact with water, contain contaminated water for later disposal. Do not flush spilled material into drains. Do not contaminate water while cleaning equipment or disposing of wastes. Keep spectators away and upwind.

---

**SECTION 7 - HANDLING AND STORAGE REQUIREMENTS**

---

**Handling:**

Use good personal hygiene. Avoid contact with eyes and skin and inhalation of dust. Use with adequate ventilation. Wash hands before eating, drinking, chewing gum, smoking or using the toilet. Operators should change and wash clothing daily. Remove clothing immediately if the insecticide gets inside. Then wash skin thoroughly using a non-abrasive soap and put on clean clothing. Water used to clean equipment must be disposed of correctly to avoid contamination.

**Storage:**

Store in its original container in isolated, dry, cool and wellventilated area. Keep from contact with other pesticide, fertilizers and seeds during storage. Store away from incompatible substances. Not to be stored next to foodstuffs and water supplies. Keep under lock and key out of reach of unauthorized persons, children and animals. Local regulations should be complied with.

**MATERIAL SAFETY DATA SHEET**



## SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

### Occupational exposure limits:

It is essential to provide adequate ventilation. The measures appropriate for a particular work site depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire and other applicable regulations.

### PERSONAL PROTECTIVE EQUIPMENT:

#### Respirator:

An approved full-face air-purifying respirator suitable for protection from mists of pesticides is required. Limitations of respirator use specified by the approving agency and the manufacturer must be observed. For emergency conditions, use an approved positive pressure self-contained breathing apparatus.

#### Clothing:

Employee must wear appropriate protective (impervious) clothing (long-sleeved shirt, long pants and shoes plus socks) and equipment to prevent skin contact with the substance.

#### Gloves:

Employee must wear appropriate chemical resistant protective gloves to prevent contact with this substance.

#### Eye protection:

Employee must wear splash-proof safety goggles and face-shield to prevent contact with this substance.

**Emergency eyewash:** Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** White to light brown soluble powder.

**Odour:** Weak characteristic odour.

**Flammability:** Not flammable.

**pH (1% solution):** Not available.

**Solubility in water:** This is a soluble powder formulation

## SECTION 10 - STABILITY AND REACTIVITY

### Storage Stability:

The product is stable at room temperature in normal warehouse conditions in original packaging.

### Stability:

Compatible with most commonly used agricultural pesticides, except with alkaline preparations. A compatibility test is required before using with other products. Do not physically mix concentrate directly with other herbicides or pesticide concentrates; always dilute first.

### Hazardous Decomposition Products:

None under normal conditions of storage and use.

## SECTION 11 - TOXICOLOGICAL INFORMATION

**Acute oral LD50:** (calculated:) 650 mg/kg.

**Acute dermal LD50:** (calculated:) > 2 000 mg/kg.

**Acute inhalation LC50:**

*Technical: LC50 rats: > 0,54 mg/6 hours*

**Acute skin irritation:** Not irritant.

**Acute eye irritation:** Not irritant.

### Teratogenicity:

No teratogenic activity at doses above the no effect observed level, were revealed.

### Mutagenicity:

Negative results were obtained in several mutagenicity assays.

**NOEL:** Mouse: 20 mg/kg body weight/day,

## MATERIAL SAFETY DATA SHEET



Rat: 10 mg/kg body weight/day.  
ADI: 0,1 mg/kg

## SECTION 12 - ECOLOGICAL INFORMATION

In rats, the carbonyl carbon is hydrolysed, and the sulphur oxidised with N-demethylation of thiomethyl derivatives. No accumulation occurs in tissues. Is rapidly excreted in the urine. DT50 in soil: 3 days.

### ECOTOXICOLOGY:

#### Fish: Toxic to fish.

LC50 (24h): carp: 1.6 mg/l

LC50 (48h): carp: 1.0 mg/l

**Bees:** Moderately toxic to honey bees.

#### Other aquatic species:

LC50: *Moina macrocopa*: 12.5 to 25 mg/l

**Product is considered a Marine Pollutant.**

## SECTION 13 - DISPOSAL CONSIDERATION

Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product that cannot be reused or reprocessed. Do not contaminate rivers, dams or any other water sources with the product or used containers.

### Package product wastes:

Emptied containers retain vapour and product residues. Observe all labelled safeguards. Empty the container of excess product into the container of the applicator. Destroy the emptied containers by perforation and flattening. Bury in an approved dumpsite. Do not re-use The empty container for any other purpose. Comply with any local legislation applying to disposal.

## SECTION 14 - TRANSPORT INFORMATION

**UN NUMBER:** 2811

### Road Transport ADR/IRD:

Class: 9

Packing group: III

Shipping name: Environmentally Hazardous

Substance. N.O.S. (cartap 500 g/kg)

**Considered a Marine Pollutant.**

## SECTION 15 - REGULATORY INFORMATION

**Symbol:** Xn, N

**Indication of danger:** Harmful, Environmentally Hazardous Substance

### Risk phrases:

**R21** Harmful in contact with skin.

**R22** Harmful if swallowed.

**R 51** Toxic to aquatic organisms

### Safety phrases:

**S 2** Keep out of reach of children.

**S 24** Avoid contact with skin.

**S 25** Avoid contact with eyes.

**S 37/39** Wear suitable gloves and eye/face protection.

**S 46** If swallowed, seek medical advice immediately and show this container or label.

**S 61** Avoid release to the environment. Refer to special instructions/safety data sheets.

## SECTION 16 - OTHER INFORMATION

**Packaging:**

## MATERIAL SAFETY DATA SHEET

Issued by: Arysta Lifescience South Africa  
Poisons Helpline 0861 555 777

Phone: 031 514 5600  
Spillage Helpline (Spill Tech) 086 100 0366



Packed in 1, 5, 10 and 25 kg aluminium foil bags, sealed and labelled according to South African regulations and guidelines.

**Disclaimer:**

The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage use of the product. It is not applicable to unusual or nonstandard uses of the product nor where instructions or recommendations are not followed. All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.

**MATERIAL SAFETY DATA SHEET**

Issued by: Arysta Lifescience South Africa  
Poisons Helpline 0861 555 777

Phone: 031 514 5600  
Spillage Helpline (Spill Tech) 086 100 0366