

CYPERMETHRIN 200 EC

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: CYPERMETHRIN 200 EC
Other identifier: Cypermethrin 200 EC
Recommended use: Insecticide
Restrictions on use: Agriculture

Supplier: Universal Crop Protection (Pty) Ltd.
Co. Reg. No.: 1983/008184/07
 PO Box 801,
 Kempton Park, 1620, South Africa
Telephone: (011) 396 2233
Fax: (011) 396 4666
Website: www.villacrop.co.za

Emergency telephone numbers:
24 Hr Transport / Spill emergency no:
 (Hazcall24) +27 86 044 4411
 (Client: Villa Crop Protection)
 Griffon Poison Information Centre +27 82 446 8946
 (Client: Villa Crop Protection)
Poisoning Emergency telephone numbers:
 Griffon Poison Information Centre +27 82 446 8946
 Poisons Information Centre +27 861 555 777

2. HAZARDS IDENTIFICATION

UN GHS, Regulation EC 1272/2008 [EU-GHS/CLP] EU & SANS 10234:2008		
Hazard classes	Hazard categories	H-statements
Physical		
Flammable liquid	Flammable Liquid 3	H226
Health		
Oral	Acute Toxicity 4	H302
Dermal	Acute Toxicity 4	H312
Skin irritation	Skin Irritation 2	H315
Eye damage	Eye Damage 1	H318
Specific Target Organ Toxicity - Single Exposure	STOT SE 3	H335
Specific Target Organ Toxicity - Repeated Exposure	STOT RE 2	H373
Environment		
Aquatic Acute	Aquatic Acute 1	H400
Aquatic Chronic	Aquatic Chronic 1	H410

The most important adverse effects:
Physiochemical effects:
 Flammable liquid and vapour.

Human health effects:

Harmful if swallowed.
 Harmful in contact with skin.
 Causes skin irritation.
 Causes serious eye damage.
 May cause respiratory irritation.
 May cause damage to the organs (nervous system) through prolonged or repeated exposure.

Label elements:



Signal word: Danger.

Hazard statements:

H226: Flammable liquid and vapour.
 H302: Harmful if swallowed.
 H312: Harmful in contact with skin.
 H315: Causes skin irritation.
 H318: Causes serious eye damage.
 H335: May cause respiratory irritation.
 H373: May cause damage to the nervous system through prolonged or repeated oral exposure.
 H400: Very toxic to aquatic life.
 H410: Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P233: Keep container tightly closed.
 P240: Ground and bond container and receiving equipment.
 P242: Use non-sparking tools.
 P243: Take action to prevent static discharges.
 P261: Avoid breathing mist, vapours and spray.
 P264+P265: Wash hands and face thoroughly after handling. Do not touch eyes.
 P270: Do not eat, drink, or smoke when using this product.
 P271: Use only outdoors in a well-ventilated area.
 P273: Avoid release into the environment.
 P280: Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.

CYPERMETHRIN 200 EC

SAFETY DATA SHEET

P301+P317: IF SWALLOWED: Get medical help.
 P303+P361+P352+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [shower].
 P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P305+P354+P338: IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P319: Get medical help if you feel unwell.
 P330: Rinse mouth.
 P332+P317: If skin irritation occurs: get medical help.
 P362+P364: Take off contaminated clothing and wash it before reuse.
 P391: Collect spillage.
 P403+P233+P235: Store in a well-ventilated place. Keep container tightly closed. Keep cool.
 P405: Store locked up.
 P501: Dispose of content/container to suitable landfill in accordance with local regulations.

Special labelling of certain mixtures:

None known.

Other hazards:

None known.

Toxicity:

Classification according to GHS: Category 4

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture.

Composition:

Chemical Name	CAS	Conc. (m/v %)	Classification EC 1272/2008
Cypermethrin 95% TC	52315-07-8	23.44 %	Acute Tox. 4 (H302) Acute Tox. 4 (H332) STOT SE 3 (H335) STOT RE 2 (H373) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
Xylene	1330-20-7	<80%	Flam. Liq. 3 (H226) Acute Tox. 4 (H312) Skin Irrit. 2 (H315) Acute Tox. 4 (H332)
Alkylbenzene sulphonate	68411-30-3	<10%	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)
Alkylphenyl polyglycoether	31726-34-8	<10%	Acute Tox. 4 (H302) Eye Dam. 1 (H318)

4. FIRST AID MEASURES

Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the event of any complaints or symptoms, avoid further exposure and consult a doctor / poison control centre.

Inhalation: Remove the source of contamination or move victim to fresh air. The patient should be kept under observation and transported to a health center if necessary.

Skin contact: Remove contaminated clothing, shoes and leather goods. Gently wipe off excess chemical. Wash skin gently and thoroughly with cold water and non-abrasive soap. Obtain medical attention if irritation persists.

Eye contact: Immediately flush eyes with a stream of clean water for at least 20 minutes, holding the eyelid(s) open. Seek medical attention if irritation persists.

Ingestion: If only small amounts have been ingested, or if treatment has been delayed, oral administration of activated charcoal and cathartic probably represents optimal management. Seek medical attention.

Anticipated acute effects:

Pyrethroids can induce **burning, itching or tingling sensations, typically in the face**, and less frequently in other regions of the skin, which readily disappear within several hours or 1 day after exposure. **Nasal discharge** and a scratchy throat from inhalation, ataxia, urinary incontinence, convulsions, nervous irritability and tremors may also appear.

Sweating and washing with warm water can exacerbate these abnormal sensations. Transient red papules, congestion and edema of the skin are occasionally seen.

The systemic symptoms in mild cases include dizziness, headache, nausea, anorexia and fatigue, or with signs of listlessness, vomiting and increased stomach secretion, usually resulting in sick leave for more than 1 day.

Anticipated delayed effects: May cause damage to the nervous system through prolonged or repeated oral exposure.

Most important symptoms/effects: No additional symptoms are known other than those already mentioned.

Advice to physician: Treat symptomatically and supportively. No specific antidote known. The product contains solvent that may cause chemical pneumonitis if aspirated into lungs. If ingested perform gastric lavage and administer activated charcoal.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Extinguish small fires with carbon dioxide, dry powder, or alcohol-resistant foam. Water spray can be used for cooling of unaffected stock

CYPERMETHRIN 200 EC

SAFETY DATA SHEET

but avoid water coming in contact with the product. Contain water used for firefighting for later disposal.

Unsuitable Extinguishing Media: High volume water jet. Use a water jet only to cool heated containers.

Specific hazards: Hazards or hazard products arising from.

Special fire-fighting 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. Remain upwind of fire. 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.

Personal protective equipment: Fire may produce irritating or poisonous vapours (toxic fumes of hydrogen cyanide, chlorine, and oxides of nitrogen and carbon), mists or other products of combustion. Fire fighters and others that may be exposed should wear NIOSH / MSHA approved self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid contact with eyes and skin. Do not breathe in spray mist or fumes/vapours. Ventilate area of spill or leak, especially in contained areas.

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

Emergency procedures: Alert firefighting personnel, evacuate unprotected personnel and animals.

Environmental Precautions: Prevent spilled product from entering sewers, waterways or ground water. This product is classified as very toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment. Any spillages or uncontrolled discharges into watercourses should be reported immediately to the police and the Department of Water / Environmental Affairs.

Methods and Materials for Containment: Contain spilled product by diking area with sand or earth.

Methods and Materials for Clean-up: Cover contained spill with an inert absorbent material such as sand, vermiculite, earth or other appropriate material. Vacuum, scoop, or sweep up material and place into a clean, dry, sealable container. Label containers with the contents and dispose of according to local regulations. Do not place spilled material back in original container. Do not re-use spilled material. Collect washings and add to the drums

already collected. Do not flush spilled material or washings into drains or waterways. To decontaminate the spill area, tools and equipment, wash with water and suitable detergent. See section 13 for disposal considerations.

7. HANDLING AND STORAGE

Handling:

Precautions for safe handling: Do not use near source of sparks or open flame. Harmful by skin or eye contact, inhalation or ingestion. Avoid contact with eyes, skin and inhalation of spray and vapour. Ensure adequate ventilation during handling and use. Do not inhale spray mist or vapours). Do not handle broken packages without protective equipment. Immediately clean up spills that occur during handling. Keep containers closed when not in use. In the case of contact with the product refer to **First Aid Measures – Section 4**. Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination.

General occupational hygiene: Practice good hygiene when using this material. Wash hands before eating, drinking, chewing gum, smoking, using the toilet or applying cosmetics. 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. Worker should shower at the end of each workday. Launder all clothing before it is re-used.

Storage:

Conditions for safe storage: Keep under lock and key and out of reach of unauthorised persons, children and animals. Store the product in its original labelled container, tightly closed, in an isolated dry cool and well-ventilated area. Do not store near heat, open flame, sources of ignition or hot surfaces. Avoid excess heat. Not to be stored next to foodstuffs, feed and water supplies. Avoid cross contamination with other pesticides and fertilisers.

Incompatible substances and mixtures: Refer to product label.

Packaging material: Fluorinated plastic containers.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

Permissible concentration

Components	Exposure limits	Type of exposure limit	Source

CYPERMETHRIN 200 EC

SAFETY DATA SHEET

Xylene	435 mg/m ³ (100 ppm)	8-hour TWA	www.osha.gov
--------	---------------------------------	------------	--

Density/Relative density: 0.9482 g/cm³
Solubility: Not available.
n-octanol/water partition coefficient: K_{ow} (logP) = 6.6 (data for technical material).
Auto-ignition temperature: Not available.
Decomposition temperature: Not available.
Viscosity: Not available.

Engineering Controls:

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.

Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OELs or other specified exposure limits. Local exhaust ventilation is preferred. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

Personal Protective Equipment:

Respiratory Protection: If used in a poorly ventilated area (airborne concentrations exceed exposure limits), use a NIOSH approved air-purifying respirator with cartridges/canisters approved for organic vapours.

Skin and Body Protection: Employee must wear appropriate protective (impervious) clothing e.g. long sleeved cotton overalls, rubber boots, face shield and hat to prevent repeated or prolonged skin contact with this product.

Hand Protection: Employee must wear appropriate chemical resistant rubber gloves (PVC or neoprene gloves) to prevent skin contact with this product.

Eye Protection: Employee must wear chemical resistant safety goggles or face-shield to prevent eye contact with this product. Contact lenses are not protective eye devices.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, yellowish-brown, free flowing emulsifiable concentrate.

Odour: Highly aromatic hydrocarbon (xylene).

pH (1% aqueous dilution): Not available.

Melting point: Not available. 60°C to 80°C (technical material, depending on purity).

Freezing Point: Not available.

Boiling Point: Not available.

Flash Point: 26°C (Tag Closed Cup method).

Flammability: Flammable (due to xylene).

Upper/lower explosion limits: Explosive due to xylene solvent.

Vapour Pressure (mm Hg): Not available.

Relative Vapour Density: Not available.

10. STABILITY AND REACTIVITY

Chemical Stability: The product is stable for 2 years at ambient temperature and pressure, under normal storage and handling conditions. Avoid storage under extreme temperatures and conditions. Store below 50°C, preferably below 30°C, and not for prolonged periods in direct sunlight.

Reactivity: None known.

Possibility of Hazardous Reactions: None known.

Conditions to Avoid: Avoid extreme heat or exposure to flames.

Incompatible Materials: Strong oxidizers, strong bases, strong reducing agents. Compatible with many insecticides, fungicides and acaricides, but incompatible with alkaline substances.

Hazardous Decomposition Products: Alcohols, carbon monoxide and carbon dioxide may form under burning conditions or with incomplete combustion.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Calculated according to GHS:

Oral LD₅₀ (24 h) >920 mg/kg.

Dermal LD₅₀ (24 h) >1900 mg/kg.

Inhalation LC₅₀ (4 h) 15.19 mg/ℓ

Skin irritation/Corrosion: Causes skin irritation.

Eye Damage/Irritation: Causes serious eye damage.

Skin Sensitization: Not classified.

Respiratory Sensitization: Not classified.

Reproductive cell mutagenicity: Not classified.

Carcinogenicity: Not classified.

Reproductive toxicity: Not classified.

Specific target organ toxicity – single exposure: Not classified.

Specific target organ toxicity – repeated exposure: May cause damage to the nervous system through prolonged or repeated oral exposure.

Aspiration hazard: Not classified.

Chronic Effects: Not classified.

POTENTIAL ADVERSE EFFECTS:

Inhalation: Maybe harmful if inhaled.

Eye contact: Due to the inerts, this product causes serious eye damage.

Skin contact: Harmful in contact with skin.

CYPERMETHRIN 200 EC

SAFETY DATA SHEET

Ingestion: Harmful if swallowed.

12. ECOLOGICAL INFORMATION

This product is toxic to aquatic organisms with long lasting effects.

ECOTOXICITY DATA: Active ingredient:

Cypermethrin.

Fish:

LC ₅₀ (96 h)	Rainbow trout	0.69 µg/l.
	Sheepshead minnows	2.37 µg/l

Daphnia:

LC ₅₀ (48 h)		0.15 µg/l.
-------------------------	--	------------

Algae:

EC ₅₀ (96 h)	<i>Selenastrum capricornutum</i>	>0.1 mg/l.
-------------------------	----------------------------------	------------

Birds:

Acute oral LD ₅₀	Mallard ducks	>10 000 mg/kg.
	Chickens	>2000 mg/kg.
Dietary LC ₅₀ (5 d)	Bobwhite quail	>5620 mg/kg feed.

Bees:

(LD₅₀, mg/bee): (24h)	Oral	0.035 mg/bee.
	Contact	0.02 mg/bee.

Worms:

LC ₅₀		>100 mg/kg soil.
------------------	--	------------------

Plants: Not determined.

ENVIRONMENTAL EFFECTS:

Animal: Not determined.

Persistence and degradability: Biological degradation is rapid and consequently levels of cypermethrin and its degradation products in soil and surface waters are very low.

Bio-accumulative Potential: Not determined.

Mobility in soil: Not determined.

Other adverse effects: Not determined.

13. DISPOSAL CONSIDERATION

Waste: Contaminated absorbents, surplus product, etc., should be burned in a high- temperature incinerator (> 1000°C) with effluent gas scrubbing. Where no incinerator is available, hydrolysis under alkaline conditions (pH 12 or above) is a suitable method to dispose of small quantities of the product. Before disposal of the resultant waste, the material must be analysed to ensure that the active ingredient has been degraded to a safe level. 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. Where possible, recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

Container: Emptied containers retain product residues. Do not re-use the empty container for any other purpose. Triple rinse empty containers by inverting the empty container over the spray or mixing tank and allow draining for at least 30 seconds after the flow has slowed down to a drip. Thereafter, rinse the container three times with a volume of water equal to a third of that of the container. Add the rinsings to the contents of the spray tank before destroying the container in the prescribed manner. Puncture the triple rinsed container and dispose of via an approved collector or recycler (www.croplife.co.za). Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages. Observe all labelled safeguards until container is destroyed.

14. TRANSPORT INFORMATION

UN NUMBER: 1993

Road Transport ADR/IRD:

Class:	3
Packing Group:	III
UN Proper Shipping Name:	FLAMMABLE LIQUID, N.O.S. (Xylene)

Maritime Transport IMDG/IMO:

Class:	3
Packing Group:	III
UN Proper Shipping Name:	FLAMMABLE LIQUID, N.O.S. (Xylene)

Marine Pollutant (Y/N): YES

Air Transport IATA/ICAO:

Class:	3
Packing Group:	III
UN Proper Shipping Name:	FLAMMABLE LIQUID, N.O.S. (Xylene)

Special/Environmental Precautions: None known.

Transport in bulk (according to MARPOL 73/78, Annex II and the IBC code): Not available.

CYPERMETHRIN 200 EC

SAFETY DATA SHEET

15. REGULATORY INFORMATION

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

OHSA 1993 Regulations for Hazardous Chemical Substances.

Relevant information regarding restrictions: None.

EU regulation: Regulation EC1272/2008 (EU-GHS/CLP)

Other national regulations: None.

Chemical Safety Assessment carried out? No

16. OTHER INFORMATION

Packed in fluorinated 500, 100, 200, 250, 500 ml and 1, 2, 5, 10, 20 litres plastic containers and labeled according to South African regulations and guidelines.

Other hazard statements, abbreviations and explanations:

H302: Harmful if swallowed.

H332: Harmful if inhaled.

H412: Harmful to aquatic life with long lasting effects.

IATA: International Air Transport Association.

IBC: International Bulk Chemical.

ICAO: International Civil Aviation Organization.

IMDG: International Maritime Dangerous Goods

IMO: International Maritime Organization.

LD₅₀ value: The median lethal dose or the amount of a toxic agent that is sufficient to kill 50 percent of a population within a certain period of time.

OEL/RL: Occupational exposure limit-recommended limit.

TWA: Time-weighted average – The average exposure over a specified period, usually a nominal eight hours.

ST/STEL: Short-term exposure limits.

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 and use of the product. It is not applicable to unusual or non-standard 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.

END OF DOCUMENT

Compiled: September 2018

Reviewed: September 2022

Revision no: (2)

Next revision: September 2027

For detailed information on revisions, contact the Registration holder.