

# UNIVERSAL HOCKEY 100 EW

# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE SUBSTANCE

**Product Name:** HOCKEY 100 EW  
**Other identifier:** Cadusafos 100 EW  
**Recommended use:** Insecticide / Nematicide  
**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](http://www.villacrop.co.za)

**Emergency telephone numbers:**  
**24 Hr Transport / Spill emergency no:**  
 Envirosure. +27 31 205 4918  
 (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  
**Villa Crop Protection Emergency number:**  
**National Safety, Health and Environmental Manager:**  
 +27 63 698 0668

## 2. HAZARDS IDENTIFICATION

UN GHS, Regulation EC 1272/2008 [EU-GHS/CLP] EU & SANS 10234:2008		
Hazard classes	Hazard categories	H-statements
<b>Health</b>		
Oral	Acute Tox. 4	H302
Dermal	Acute Tox. 2	H310
Inhalation	Acute Tox. 2	H330
<b>Environment</b>		
Aquatic acute	Aquatic Acute 2	H401

**The most important adverse effects:**  
**Physiochemical effects:**  
 None known.  
**Human health effects:**  
 Harmful if swallowed  
 Fatal in contact with skin

## Label elements:



**Signal word:** Danger

### Hazard statements:

H300: Harmful if swallowed.  
 H310: Fatal in contact with skin.  
 H330: Fatal if inhaled.  
 H400: Toxic to aquatic life.

### Precautionary statements:

P260: Do not breathe mist/spray.  
 P262: Do not get in eyes, on skin, or on clothing.  
 P264: Wash hands and face thoroughly after handling.  
 P270: Do not eat, drink or smoke when using this product.  
 P273: Avoid release into the environment.  
 P280: Wear protective gloves/protective clothing.  
 P284: In case of inadequate ventilation wear respiratory protection.  
 P301+P310: IF SWALLOWED: Immediately call a POISON CENTER.  
 P302/352: IF ON SKIN: Wash with plenty of water and non-abrasive soap.  
 P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P310: Immediately call a POISON CENTER.  
 P330: Rinse mouth.  
 P361/364: Take off immediately all contaminated clothing and wash before reuse.  
 P391: Collect spillage.  
 P403+P233: Store in a well-ventilated place. Keep container tightly closed.  
 P405: Store locked up.  
 P501: Dispose of content/container to suitable landfill in accordance with local regulations.

### Special labelling of certain mixtures:

Red band.

### Other hazards:

None known.

### Toxicity:

Classification according to GHS: Cat. 2  
 Classification according to WHO: Cat. IB  
 Classification according to GPIC: Cat. IB

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Substance/Mixture:** Mixture.

**Composition:**

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Chemical Name	CAS	Conc. (m/v %)	Classification EC 1272/2008
Cadusafos 90% TC	95465-99-9	10 %	Acute Tox. 2 (H300) Acute Tox. 1 (H310) Acute Tox. 1 (H330) Aquatic Acute 1 (H400)
Ethoxylated Polyaryphenol	99734-09-5	< 5 %	Aquatic chronic 3 (H412)

ventilation. If cyanosis is absent: Adults – start treatment by giving 2 mg atropine intravenously or intramuscularly, if necessary, and repeat with 0.4 to 2.0 mg atropine at 15 minute intervals until atropinisation occurs (tachycardia, flushed skin, dry mouth, mydriasis): Children under 12 - initial dose = 0.05 mg/kg body weight and repeat dose = 0.02 to 0.05 mg/kg body weight. Start 2-PAM (Protopam®, Ayerst®) at the same time, following manufacturer's recommended dosages and administration. Morphine, reserpine, phenothiazines and theophylline are probably contraindicated.

At first sign of pulmonary edema, the patient should be given supplemental oxygen and treated symptomatically. Observe patient to insure that these symptoms do not recur as atropinisation wears off. If in eyes, instil one drop of homatropine. Contains aromatic hydrocarbons that can produce a severe pneumonitis if aspirated during vomiting. Consideration should be given to gastric lavage with an endotracheal tube in place. Treatment is otherwise controlled removal of exposure followed by symptomatic and supportive care.

Some individuals have a genetically determined low level of plasma pseudocholinesterase. These persons are particularly vulnerable to the action of the muscle-paralyzing drug succinylcholine, often administered to surgical patients. They may be unusually sensitive to organophosphate toxicity; this has not yet been proven. Patients with advanced liver disease, malnutrition, chronic alcoholism and dermatomyositis exhibit low plasma cholinesterase activities. Some cholinesterase depression may occur during early stages of pregnancy or with use of birth control pills.

## 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. Immediately consult a doctor.

**Inhalation:** Remove person from contaminated area to fresh air and assist breathing as needed. If breathing has stopped, perform artificial respiration and administer oxygen. Avoid mouth-to-mouth resuscitation. Keep the person warm and at rest. Treat symptomatically and supportively as and when required. **Seek medical advice immediately.**

**Skin contact:** Remove contaminated clothing, shoes and leather goods immediately. Gently wipe off excess chemical. Wash skin gently and thoroughly with non-abrasive soap or mild detergent and large amounts of water until no evidence of chemical remains (approximately 15 to 20 minutes). Seek medical advice immediately.

**Eyes:** Flush eyes with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. **Seek medical attention.**

**Ingestion:** Seek medical attention or call a poison control centre for treatment advice. Do not induce vomiting unless instructed to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

**Anticipated acute effects:** None known.

**Anticipated delayed effects:** None known.

**Most important symptoms/effects:** Effects of overexposure to **Cadusafos** in case of absorption through skin and eyes results on the following symptoms: headache, light-headedness, weakness, abnormal cramps, nausea, excessive salivation, perspiration, blurred vision, tearing, pin-point pupils, blue skin colour, convulsions, tremor and coma.

**Advice to physician:** Atropine sulfate is antidotal. Support respiration as needed with removal of secretions, maintenance of a patent airway and, if necessary, artificial

## 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing Media:** Use carbon dioxide, dry powder, or alcohol-resistant foam. Water spray can be used for cooling of unaffected stock, but avoid water coming in contact with the product. Use as little water as possible. Use spray or fog. Solid stream may cause spreading. Contain water used for fire fighting for later disposal. Avoid the accumulation of polluted run-off from the site.

**Unsuitable Extinguishing Media:** Water jet. Use a water jet only to cool heated containers. Water may be ineffective in controlling fire.

**Specific hazards:** Fire may produce irritating or poisonous vapours or gases (oxides of chlorine and sulphur) or other products of combustion. Fire fighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus.

**Special Fire Fighting Procedures:** Remove spectators from surrounding area. Isolate the fire area and evacuate all personnel downwind of the fire. Fight fire from

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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.

**Personal protective equipment:** Wear NIOSH/MSHA approved self-contained breathing apparatus and full bunker gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Avoid contact with skin and eyes. Do not breathe in fumes. 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 to be toxic to aquatic. 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 the material 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:** Harmful if swallowed. Avoid inhalation and contact with eyes and skin. Ensure adequate ventilation during handling and use. 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.

**General occupational hygiene:** Practice good hygiene when using this material. Wash hands before eating, drinking, chewing gum, smoking, using the toilet or applying cosmetics. 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 in its original, labelled container, tightly closed, in an isolated, dry, cool and well-ventilated area. 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 CONTROLS AND PERSONAL PROTECTION

**Permissible concentration:** No occupational exposure limits have been determined for the significant ingredients in this product.

### 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:

**Respirator Protection:** An NIOSH approved full-face respirator suitable for protection from spray or mists of pesticides is required. Limitations of respirator use specified by the approved agency and the manufacturer must be observed.

**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:** The use of chemically protective gloves is recommended to prevent against skin contact.

**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.

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**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:** Oily liquid.  
**Colour:** Light yellow to yellow.  
**Odour:** Mercaptan odour.  
**pH (1% aqueous dilution):** Not available.  
**pH:** 4.5  
**Melting point:** Not available.  
**Freezing Point:** Not available.  
**Boiling Point:** Not available.  
**Flash Point:** Not available.  
**Relative Vapour Density:** Not available.  
**Specific gravity:** 1.03 to 1.06 g/cm<sup>3</sup> at 20 °C.  
**Solubility in water:** Dispersible.  
**Flammability:** Not flammable.  
**Kinematic viscosity:** 4.75 mm<sup>2</sup>/s at 40 °C  
**Surface Tension:** 32 mN/m at 25 °C  
**Upper/lower explosion limits:** Not available.  
**Vapour Pressure (mm Hg):** Not available.  
**Solubility:** Not available.  
**n-octanol/water partition coefficient:** Not available.  
**Auto-ignition temperature:** Not available.  
**Decomposition temperature:** Not available.

## 10. STABILITY AND REACTIVITY

**Chemical Stability:** The product is stable for two 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:** Will not occur.  
**Conditions to Avoid:** Extreme heat or exposure to flames.  
**Incompatible Materials:** Strong oxidizers, strong bases, strong reducing agents.  
**Hazardous Decomposition Products:** Releases carbon monoxide, carbon dioxide, and Sulfur dioxide and Phosphorus pentoxide.

## 11. TOXICOLOGICAL INFORMATION

**ACUTE TOXICITY:** Formulated product.  
**Calculated according to WHO:**  
**Oral LD<sub>50</sub> (24 h) rat:** >330 mg/kg.  
**Dermal LD<sub>50</sub> (24 h) rat:** 100 mg/kg.  
**Calculated according to GHS:**

**Oral LD<sub>50</sub> (24 h) rat:** >330 mg/kg.  
**Dermal LD<sub>50</sub> (24 h) rat:** 100 mg/kg.  
**Inhalation LC<sub>50</sub> (4 h) rat:** >0.23 mg/l  
**Skin Irritation/Corrosion:** Not available.  
**Eye Damage/Irritation:** Not available.  
**Skin Sensitization:** Not available.  
**Respiratory Sensitization:** Not available.  
**Reproductive cell mutagenicity:** Not available.  
**Carcinogenicity:** Not available.  
**Reproductive toxicity:** Not available.  
**Specific target organ toxicity – single exposure:** Not available.  
**Specific target organ toxicity – repeated exposure:** Not available.  
**Aspiration hazard:** Not available  
**Chronic Effects (other targets e.g. developmental):** Not available.  
**POTENTIAL ADVERSE EFFECTS:**  
**Inhalation:**  
**Skin contact:** Fatal in contact with skin.  
**Eye contact:** Not available  
**Ingestion:** Harmful if swallowed.

## 12. ECOLOGICAL INFORMATION

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

### ECOTOXICITY DATA: Active ingredient:

#### Cypermethrin.

**Fish:**  
 LC<sub>50</sub> (96 h) Rainbow trout 0.13 mg/l  
 Bluegill sunfish 0.17 mg/l

**Daphnia:**  
 LC<sub>50</sub> (48 h) 0.16 µg/l

**Algae:**  
 EC<sub>50</sub> (96 h) 5.3 mg/l

**Birds:**  
 Acute oral LD<sub>50</sub> Bobwhite quail >16 mg/kg.  
 Mallard ducks >230 mg/kg.

**Bees:**  
**(LD<sub>50</sub>, mg/bee):**  
**(24h)** c. 1.9 mg/bee.

**Worms:**  
 LC<sub>50</sub> (14 d) *Eisenia foetida* 72 mg/kg.

**Plants:** not determined.

### ENVIRONMENTAL EFFECTS:

**Animal:** Readily absorbed, metabolised and eliminated in urine and faeces. Hydroxy sulfones were the major metabolites, followed by phosphorothioic and sulfonic acids.

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**Soil:** 1 DT<sub>50</sub> in silty clay, sandy loam soils 11-55 d. K<sub>oc</sub> 144 to 351.

**Persistence and degradability:** Not determined.

**Bio-accumulative Potential:** Not determined.

**Mobility in soil:** Not determined.

**Other adverse effects:** Not determined.

## 13. DISPOSAL CONSIDERATION

**Waste:** 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 vapour and 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 one third of that container. Add the rinsing's to the contents of the spray tank before recycling or destroying the container in the prescribed manner. Destroy the container by perforating and flattening and dispose of through an approved waste dumpsite, incineration plant or recycling company. Observe all labelled safeguards until container is destroyed.

## 14. TRANSPORT INFORMATION

**UN NUMBER:** 3278  
**Road Transport ADR/IRD:**  
 Class: 6.1  
 Packing group: II  
 Shipping name: ORGANOPHOSPHORUS COMPOUND, LIQUID, TOXIC, N.O.S.  
 (Cadusafos 100 g/l)

**Maritime Transport IMDG/IMO:**  
 Class: 6.1  
 Packing group: II  
 Shipping name: ORGANOPHOSPHORUS COMPOUND, LIQUID, TOXIC, N.O.S.  
 (Cadusafos 100 g/l)

**Marine Pollutant (Y/N):** YES

### Air Transport IATA/ICAO:

Class: 6.1  
 Packing group: II  
 Shipping name: ORGANOPHOSPHORUS COMPOUND, LIQUID, TOXIC, N.O.S.  
 (Cadusafos 100 g/l)

**Special/Environmental Precautions:** None known.

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

## 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

**Packing and Labelling:** Packed in 5, 10, 20, 25 and 50 litres fluorinated plastic containers and labelled according to the South African regulations and guidelines.

### Additional H-statement (s) (formulants)

**H400:** Very toxic to aquatic life.

**H412:** Harmful to aquatic life with long lasting effects.

**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 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:** October 2018  
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For detailed information on revisions, contact the Registration holder.