

**Material Safety Data Sheet**  
**Duduthrin 1.75 EC**

**TWIGA CHEMICALS**

**1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

**Product name :** Duduthrin 1.75 EC  
**Company :** Twiga Chemical Industries Ltd.  
Ol Kalou Road, off Nanyuki Road, Industrial Area,  
P.O. Box 30172, 00100 GPO Nairobi - Kenya.  
**Phone number :** 254 (020) 020-530020, 550405, Fax:530022

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

**Product Description**

A pyrethroid insecticide.  
An emulsifiable concentrate.

EEC-No. : 415-130-7 Lambda-cyhalothrin  
EEC-No. : 265-199-0 Solvent naphtha (petroleum), light aromatic

Hazardous Ingredients	CAS No.	Hazard Symbols	Risk Phrases	Concentration
Lambda-cyhalothrin	91465-08-6	T+,N	R26-R25-R21-R50	17.5 g/l
Alkylphenol Ethoxylate		Xn	R22-R36/38-R53	< 100 g/l
Solvent naphtha (petroleum),	64742-95-6	light aromatic Xn,N	R10-R37-R51/53-R6 5	> 500 g/l

**3. HAZARDS IDENTIFICATION**

Harmful if swallowed.  
This material causes irritation following skin contact and can cause serious damage to the eyes.  
May cause tingling/numbness in exposed areas (paraesthesia).  
Flammable.  
Very toxic to aquatic organisms.

**4. FIRST AID MEASURES**

If you feel unwell, seek medical advice (show the label where possible).  
**Eye contact :** Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 15 minutes. Obtain immediate medical attention.  
**Skin contact :** Take off immediately all contaminated clothing. Wash skin immediately with water, followed by soap and water. Such action is essential to minimise contact with skin. Contaminated clothing should be laundered before re-issue.  
**Inhalation :** Remove patient from exposure, keep warm and at rest. Obtain medical attention as a precaution.  
**Ingestion :** If swallowed seek medical advice immediately and show the container, label or this Data Sheet, if possible.  
Do not induce vomiting.

**Medical advice**

Gastric lavage may be effective when performed within 4 hours of ingestion.  
Aspiration of this material into the lungs should be avoided.  
Symptomatic treatment and supportive therapy as indicated.

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#### 5. FIRE FIGHTING MEASURES

Flammable.

Keep fire exposed containers cool by spraying with water.

Extinguishing media : For small fires, use foam, carbon dioxide or dry powder extinguishant. For large fires, use foam or water-fog; avoid use of water jet. Contain run-off water with, for example, temporary earth barriers.

Protective Equipment : A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

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#### 6. ACCIDENTAL RELEASE MEASURES

Personal

precautions : Ensure suitable personal protection during removal of spillages. This means wearing a face mask that gives protection against organic vapours, eye protection, chemically resistant gloves, boots and coveralls.

Clean up

methods : Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal. Wash the spillage area with water. Washings must be prevented from entering surface water drains.

Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

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#### 7. HANDLING AND STORAGE

##### HANDLING

Read the label before use.

##### Safe handling

Advice : Avoid contact with skin and eyes. Do not breathe spray.  
Avoid inhalation of high concentrations of vapours. When using do not eat, drink or smoke. Wash face and hands before eating, drinking or smoking.

##### STORAGE

Safe storage advice : Keep only in the original container. Keep container tightly closed. Keep out of the reach of children. Keep away from food, drink and animal feeding stuffs.

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#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

##### Personal protection

When using this product refer to the label for details.

##### Occupational exposure limits

Hazardous ingredient : Lambda-cyhalothrin Twiga Chemicals Standard  
8 hr TWA 0.04 mg/m<sup>3</sup>  
Sk : Can be absorbed through skin

Hazardous ingredient : Mixed hydrocarbon solvents OES/HSE  
8 hr TWA 200 mg/m<sup>3</sup>  
(Manufacturer/Supplier's Calculation)

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Not applicable to field use.

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: liquid
Colour	: almost colourless to pale yellow
Odour	: aromatic
Boiling point	: Not available.
Melting point	: Not available.
Flash point	: 38 °C
Autoignition	: Not available.
Temperature	:
Explosive properties	: Not applicable
Vapour pressure	: Not available.
Density : 0.9 g/ml	
Solubility	: miscible in/with water
pH-value (quant.)	:
	: Not available.
Partition coeff.	: Not available.
Oxidizing properties	:
	: Not applicable

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### 10. STABILITY AND REACTIVITY

Hazardous decomposition

Products : Combustion or thermal decomposition will evolve toxic and irritant vapours.

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### 11. TOXICOLOGICAL INFORMATION

#### ACUTE TOXICITY (LETHAL DOSES)

This health hazard assessment is based on information available on similar products.

Oral Median Lethal Dose rat

: (calculated) 1000 .. 2000 mg/kg

Harmful if swallowed.

Dermal Median Lethal Dose rat

: (calculated) > 4000 mg/kg

Inhalation

Unlikely to cause harmful effects under normal conditions of handling and use.

#### ACUTE TOXICITY (IRRITATION, SENSITISATION ETC.)

Eye Irritation : May cause severe eye irritation.

Skin Irritation : May cause severe irritation.

Skin Sensitisation : May cause skin sensitisation in some cases.

Other Effects : In humans may cause tingling or numbness in exposed areas (paraesthesia).  
The effect may result from splash, aerosol or transfer to the face from contaminated gloves and hands. This effect is transient, lasting up to 24 hours.

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### 12. ECOLOGICAL INFORMATION

#### ECOTOXICITY



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This environmental hazard assessment is based on information available on similar products.

Toxicity to fish : LC50 96 hours rainbow trout (flow through)

: approx 20 µg/l

Very toxic to aquatic organisms.

(Not necessarily identical to the EC classification risk phrases).

### 13. DISPOSAL CONSIDERATIONS

Do not contaminate ponds, waterways or ditches with chemical or used containers.

Surplus material must be disposed of as detailed in the 'Guidelines for the avoidance, limitation and disposal of pesticide waste on the farm' GCPF, 1987.

Empty containers should be washed and discarded. Empty containers should not be used for other purposes.

Disposal should be in accordance with local, state or national legislation.

### 14. TRANSPORT INFORMATION

#### Road transport ADR/RID

UN No. : UN1993

Class-primary : 3 Flammable Liquid

Number/letter: : 31 / (c)

Proper shipping name : 1993 FLAMMABLE LIQUID, N.O.S., SUBSTITUTED  
BENZENOID HYDROCARBONS

#### Maritime transport IMDG

UN No. : UN1993

Class-primary : 3.3 Flammable Liquid

UN Pack. Group : III

Proper shipping name : FLAMMABLE LIQUID, N.O.S., (contains substituted benzenoid  
hydrocarbons and lambda-cyhalothrin 1.75%)

Marine pollutant : Yes

#### Air transport ICAO/IATA

UN/ID No.: : UN1993

Class-primary : 3 Flammable Liquid

UN Pack. Group : III

Proper shipping name : FLAMMABLE LIQUID, N.O.S., (contains substituted benzenoid  
hydrocarbons and lambda-cyhalothrin 1.75%)

### 15. REGULATORY INFORMATION

Classification : **HARMFUL FLAMMABLE**

Hazard symbols : **Xn**

Risk Phrases : (R22) Harmful if swallowed.  
(R41) Risk of serious damage to eyes.  
(R38) Irritating to skin.

Safety Phrases : (S2) Keep out of the reach of children.  
(S13) Keep away from food, drink and animal feeding stuffs.  
(S20/21) When using, do not eat, drink or smoke.  
(S25) Avoid contact with eyes.  
(S26) In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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(S46) If swallowed, seek medical advice immediately and show this container or label.

Special label : (S053) Do not re-use container, keep tightly closed in a safe place.

This substance is covered by the EEC Dangerous Substances Directive (CPL Regulations). It has therefore been labelled in accordance with these regulations.

Users should ensure that they comply with any relevant local, state or national legislation.

**16. OTHER INFORMATION**

Use: : To control insect pests.

Duduthrin 1.75 EC is the property of Twiga Chemicals

Read the label before you buy : use pesticides safely.

This data sheet was prepared in accordance with Directive 91/155/EC (93/112/EC). 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.

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