

# MATERIAL SAFETY DATA SHEET

## KLARTAN

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

**Product name** : KLARTAN  
**Chemical name of active ingredient(s)** : Tau-fluvalinate  
**Code no.** : R-10834.G  
**Supplier** : Makhteshim Agan (UK) Limited  
 Unit 16, Thatcham Business Village Colthrop Way  
 Thatcham  
 Berkshire RG19 4LW  
 Tel No: 01635 860555 Fax No: 01635 861555  
**Emergency telephone number** : National Chemical Emergency Centre  
 Tel: 01865 407333

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance/preparation** : Preparation

**Information on hazardous ingredients** \*

Common name	CAS No.	%	EC Number	Symbol	R-Phrases
Tau-fluvalinate	102851-06-9	24		Xn, N	R22-38-50/53
1,2-ethanediol	000107-21-1	1-10	203-473-3	Xn	R22

\* *Occupational Exposure Limit(s), if available, are listed in section 8*

### 3. HAZARDS IDENTIFICATION

**Human health hazards** : Not hazardous.  
**Environmental hazards** : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 4. FIRST-AID MEASURES

**Effects and symptoms**

**First-aid measures**

**Inhalation** : Remove victim to fresh air.  
**Ingestion** : If swallowed, seek medical advice immediately and show this container or label; administer active carbon in a large amount of water. Never give anything by mouth to an unconscious person.  
 Do not induce vomiting.  
**Skin contact** : Wash off with plenty of water and soap. Remove contaminated clothing.  
**Eye contact** : Wash out with plenty of water. Consult an eye specialist.  
**Notes to a physician** : There is no specific antidote. Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Extinguishing media**

**Suitable** : Dry chemical, water spray, foam, carbon dioxide.

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<b>Not suitable</b>	: Direct water jets.
<b>Special fire-fighting procedures</b>	: Dike fire control water for later disposal. Prevent all discharge into the environment.
<b>Unusual fire/explosion hazards</b>	: Combustion products are toxic and/or irritant. Measures must be taken to prevent the contaminated extinguishing agent from seeping into the ground or from spreading uncontrollably.
<b>Hazardous thermal (de)composition products</b>	: Toxic and/or irritating gas.
<b>Protection of fire-fighters</b>	: Self-contained breathing apparatus.

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	: Wear suitable protective clothing, nitrile rubber gloves, safety glasses or face shield.
<b>Environmental precautions</b>	: Do not discharge into drains or the environment.
<b>Methods for cleaning up</b>	: Collect and contain as much free liquid as possible. Absorb remainder in sand or other inert material. Place into a clean container and cover container loosely for later disposal.

### 7. HANDLING AND STORAGE

<b>Handling</b>	: Avoid contact with skin and eyes. Do not breathe fumes. Wear suitable protective clothing, nitrile rubber gloves, safety glasses or face shield.
<b>Storage</b>	: Keep only in the original container at a temperature not exceeding 40°C. Keep away from food, drink and animal feedingstuffs.
<b><u>Packaging materials</u></b>	
<b>Suitable</b>	: Coextruded polyethylene bottles; Drums with polyethylene liner.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Occupational Exposure Limits</b>	
<b><u>Common name</u></b>	: <b>1,2-ethanediol</b>
<b>TLV (USA)</b>	: 100 mg/m <sup>3</sup> ; 39.4 ppm.
<b><u>Personal protective equipment</u></b>	
<b>Respiratory system</b>	: In case of insufficient ventilation, wear suitable respiratory equipment.
<b>Skin and body</b>	: Wear suitable protective clothing and boots.
<b>Hands</b>	: nitrile rubber gloves.
<b>Eyes</b>	: Safety goggles or face shield.
<b>Other information</b>	: Wash hands thoroughly after handling.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state</b>	: Liquid.
<b>Colour</b>	: White - yellowish.
<b>Odour</b>	: Characteristic.

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**Density** : 1.07 - 1.11 g/cm<sup>3</sup> (20°C).  
**Solubility in water** : Miscible.  
**pH** : 3 - 7 (1% soluzione).  
**Flash point** : > 100°C (Closed cup).  
**Flammability** : Not flammable (Combustible).  
**Explosion properties** : Not explosive.

### 10. STABILITY AND REACTIVITY

**Stability** : Stable under normal conditions.  
**Conditions to avoid** : Avoid temperatures above 40°C.  
**Materials to avoid** : strong acids, strong bases.  
**Hazardous reactions** : Not known.  
**Hazardous decomposition products** : Emits toxic fumes.

### 11. TOXICOLOGICAL INFORMATION

**Acute toxicity - Oral** : LD<sub>50</sub> > 2000 mg/kg, rat.  
**Acute toxicity - Dermal** : LD<sub>50</sub> > 2000 mg/kg, rat.  
**Acute toxicity - Inhalation** : LC<sub>50</sub> > 5.5 mg/l (4 hours) rat - Tau-fluvalinate.  
**Skin irritation** : Not irritating (rabbit).  
**Eye irritation** : Not irritating (rabbit).  
**Sensitization** : Guinea pig maximization test: Non sensitizer

### 12. ECOLOGICAL INFORMATION

Very toxic to aquatic organisms.

**Ecotoxicity** : Fish: LC<sub>50</sub> > 0.024 mg/l, 96 hours (rainbow trout).  
 Algae: EC<sub>50</sub> = >100 mg/l (72 hours).  
 Daphnia: LC<sub>50</sub> = 0.011 mg/l (48 hours)

### 13. DISPOSAL CONSIDERATIONS

**Methods of disposal** : Disposal according to the local legislation.

### 14. TRANSPORT INFORMATION

**International transport regulations**

**UN number** : 3082

**Land - Road/Railway**

**Proper shipping name** : Environmentally hazardous substance, liquid, N.O.S. (Tau-fluvalinate 24%).  
**ADR/RID Class** : 9  
**ADR/RID Item number** : 11 (c)  
**Packing group** : III

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**Inland waterways**

**Sea**

**Proper shipping name** : Environmentally hazardous substance, liquid, N.O.S. (Tau-fluvalinate 24%).  
**IMDG Class** : 9  
**Packing group** : III  
**Medical First Aid Guide (MFAG)** : None.  
**Emergency Schedules (EmS)** : None.

**Air**

**Proper shipping name** : Environmentally hazardous substance, liquid, N.O.S. (Tau-fluvalinate 24%).  
**IATA-DGR Class** : 9

**National transport regulations**

No additional national transport regulations are known to the supplier

### 15. REGULATORY INFORMATION

**Classification** : This product is provisionally labelled by the supplier in accordance with the suppliers understanding of the EU regulations.

**Hazard symbol(s)** : N



DANGEROUS FOR THE ENVIRONMENT (N)

**Risk phrases** : R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety phrases** : S29: Do not empty into drains.  
 S57: Use appropriate containment to avoid environmental contamination.

**Contains** : 240 g/l Tau-fluvalinate.

### 16. OTHER INFORMATION

**Recommended use** : Insecticide

The information contained in the Safety Data sheet is correct to the best of our knowledge at the date of issue. It is intended as a guide for the safe use, handling, disposal, storage and transportation and is not intended as a warranty or as a specification. The information relates only to the product specified and may not be suitable for combinations with other materials or in processes other than those specifically described herein.

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**HISTORY**

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