

# Safety Data Sheet

Issue date: 30-May-2002

replaces all previous editions

## GARLON 2

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

#### Identification of the Substance or Preparation

Trade Name                    GARLON 2  
AGI Code                        1000990

#### Company Identification

Company                        Syngenta Crop Protection UK Ltd  
   Whittlesford, CAMBRIDGE, CB2 4QT  
Phone                            (01223) 833621  
Fax                                (01223) 493700  
Website                         www.syngenta-crop.co.uk  
Emergency Phone            0044 (0)1484 538444 (24h)

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

#### Product Description

A systemic herbicide. An emulsifiable concentrate.

EC-No. : 232-489-3 White spirit

EC-No. : 265-024-8 Triclopyr 2-butoxyethyl ester

CAS-No.	Hazardous ingredients	% w/v	Hazard symbols	Risk Phrases (R)
8052-41-3	White spirit	> 50		10-65
64700-56-7	Triclopyr 2-butoxyethyl ester	33.4	Xn, N	22-43-50/53

### 3. HAZARDS IDENTIFICATION

Irritating to skin. May cause sensitisation by skin contact. May cause eye irritation. May cause damage if aspirated into the lungs. Flammable. Very toxic to fish.

### 4. FIRST AID MEASURES

**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**

If the amount of chemical is judged to be less than a lethal dose, observe the patient and treat symptomatically. If gastric lavage is considered necessary, prevent aspiration of gastric material. Consider administration of activated charcoal and a laxative.

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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 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 water courses must be alerted to the appropriate regulatory body.

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**7. HANDLING AND STORAGE****Handling**

Read the label before use. Avoid contact with skin and eyes. Do not breathe spray. When using do not eat, drink or smoke. Wash face and hands before eating, drinking or smoking.

**Storage**

Keep in original containers, tightly closed, out of reach of children. Keep away from food, drink and animal feeding stuffs. Protect from frost.

Storage Life : Physically and chemically stable for at least 2 years when stored in the original unopened sales container at ambient temperatures.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Controls

#### Occupational Exposure Limits HSE :

White spirit: LTEL ( 8 hr TWA), 100 ppm, 575 mg/m<sup>3</sup>; STEL (15 min), 125 ppm, 720 mg/m<sup>3</sup>

#### Internal exposure limit: (Triclopyr OEL)

(Manufacturer/Supplier's Calculation) : Skin 2 mg/m<sup>3</sup>

Not applicable to field use.

### Personal Protection

When using this product refer to the label for details. In all other cases, use the following Personal Protective Equipment:

When selecting personal protective equipment, users should consult their supplier to confirm that the equipment is suitable.

**Respiratory:** Wear suitable respiratory protective equipment if exposure to high levels of material are likely. Respiratory protective equipment should conform to the appropriate EN standard.

**Eye:** Wear suitable eye/face protection conforming to EN 166.

**Hand:** Wear suitable gloves conforming to EN 374.

**Body:** Wear suitable protective clothing.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: Liquid.
Colour	: Light brown.
Odour	: Turpentine-like.
Boiling point	: > 150 °C
Melting point	: Not available.
Flash point	: 46 °C
Autoignition temperature	: Not available.
Explosive properties	: Non-explosive.
Vapour pressure	: Not available.
Density	: 0.92 .. 0.94 g/ml at 20 °C
Solubility in/with water	: Miscible.
pH-value (quant.)	: Not available.
Partition coeff.	: Not available.
Oxidizing properties	: Non-oxidising

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## 10. STABILITY AND REACTIVITY

Hazardous reactions (materials to avoid) : Incompatible materials: strong acids, strong bases, strong oxidising agents

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

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## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity (Lethal Doses)

Oral Median Lethal Dose rat : 2000 mg/kg. Low oral toxicity.

The solvent(s) in this product may cause bronchopneumonia or pulmonary oedema if aspirated into the respiratory system during ingestion or from vomiting.

Dermal Median Lethal Dose Skin contact rat : > 2000 mg/kg.

Inhalation : Unlikely to cause harmful effects when handled and used as directed on the label.

**Acute Toxicity (Irritation, Sensitisation etc.)**

Eye Irritation : May cause eye irritation.  
Skin Irritation : Irritating to skin.  
Skin Sensitisation : May cause sensitisation by skin contact.

**Chronic Toxicological Effects / Long Term Exposure**

Long Term Exposure : No long term risks to man are associated with this material when handled and used as directed on the label.

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**12. ECOLOGICAL INFORMATION****PERSISTENCE AND DEGRADATION**

Rapidly hydrolysed in soil and water (with a half-life of less than 1 day) to the parent acid, which undergoes further degradation.  
Half-life of the parent acid in soil and water is dependent on conditions and is approximately 6 to 52 days.

**ECOTOXICITY**

: LC50 (aquatic species)  
: 0.1 .. 1 mg/l

This ecological assessment is calculated from data available on the components of the formulation. Highly toxic to fish (Not necessarily identical to the EC classification risk phrases).  
This material is slightly toxic to aquatic invertebrates on an acute basis (10mg/L < LC50 < 100mg/L)

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**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.

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**14. TRANSPORT INFORMATION****Road transport ADR/RID**

UN No. : UN1993  
Class-primary : 3 Flammable Liquid  
UN Pack. Group : III  
Proper shipping name : FLAMMABLE LIQUID, N.O.S., (CONTAINS WHITE SPIRIT & TRICLOPYR 2-BUTOXYETHYL ESTER 35.8%)

**Maritime transport IMDG**

UN No. : UN1993  
Class-primary : 3 Flammable Liquid  
UN Pack. Group : III  
Proper shipping name : FLAMMABLE LIQUID, N.O.S., (contains white spirit & triclopyr 2-butoxyethyl ester 35.8%)  
Marine pollutant : Classified as a Marine Pollutant

**Air transport ICAO/IATA**

UN/ID No. : UN1993  
Class : 3 Flammable Liquid  
UN Pack. Group : III  
Proper shipping name : FLAMMABLE LIQUID, N.O.S., (contains white spirit & triclopyr 2-butoxyethyl ester 35.8%)

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## 15. REGULATORY INFORMATION

<b>Classification</b>	<b>IRRITANT &amp; FLAMMABLE</b>	
<b>Hazard symbols</b>	<b>Xi</b>	
<b>Risk Phrases (R)</b>	10	Flammable
	38	Irritating to skin.
	43	May cause sensitisation by skin contact.
	65	Harmful: May cause lung damage if swallowed.
<b>Safety Phrases (S)</b>	2	Keep out of the reach of children.
	13	Keep away from food, drink and animal feeding stuffs.
	20/21	When using, do not eat, drink or smoke.
	23	Do not breathe spray
	36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
	62	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

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.

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## 16. OTHER INFORMATION

Approval number: MAFF 06616.  
Based upon SDS release date 04/03/02. Version 5.  
Always read the label. Use pesticides safely.

GARLON is a Registered Trademark of Dow Agrosiences LLC. It is marketed by a Syngenta Group Company who are authorised users of the Trademark.

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

**The information contained herein is based on the present state of our knowledge as is intended to describe the product from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.**