

# SAFETY DATA SHEET

## CROSSFIRE 480

2524 1.00 GB Current 08.12.2000

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

|                                  |  |
|----------------------------------|--|
| Trade Name                       | CROSSFIRE 480  |
| Product (Specification) Code     | 2524   |
| Aventis CropScience Product Code | None known.  |
| Usage                            | Emulsifiable Concentrate (solvent based) Insecticide                       |
| Appearance                       | Clear amber liquid   |
| Manufacturer/Supplier            | Bayer Environmental Science  |
| Address                          | Durkan House 214-224 High Street<br>Waltham Cross Hertfordshire<br>EN8 7DP |
| Phone Number                     | 01992 784270   |
| Fax Number                       | 01992 784276   |
| Emergency Phone Number           | 0800 220876 (24 hr UK)<br>+44 1603 242424 (24 hr Overseas)                 |

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous Components in Product for EC

| Component Name  | CAS No    | Conc. %w/w | R Phrases      | Classification |
|-----------------|-----------|------------|----------------|----------------|
| 1. Chlorpyrifos | 2921-88-2 | 44.70      | R24/25, R50/53 | T, N           |
| 2. Solvent      | -         | > 10.00    |                |                |

### 3. HAZARDS IDENTIFICATION

|              |  |
|--------------|--|
| Main Hazards | Flammable. Harmful in contact with skin and if swallowed. Irritating to skin.<br>Harmful : may cause lung damage if swallowed. |
|--------------|--|

### 4. FIRST-AID MEASURES

|                      |   |
|----------------------|---|
| Eyes                 | Rinse immediately with clean water for at least 15 minutes and obtain medical aid.  |
| Skin                 | Carefully remove contaminated clothing. Wash affected area with soap and water. Seek medical aid if at all worried.   |
| Ingestion            | Wash out mouth with water. Do not induce vomiting. Keep patient at rest and seek URGENT medical aid.  |
| Inhalation           | If inhaled, remove to fresh air and keep at rest. Obtain medical aid immediately.   |
| Advice to Physicians | Please note that Chlorpyrifos is a cholinesterase inhibiting compound.<br>Brief Summary of Symptoms and Signs:<br>Local Contamination: Causes skin and eye paraesthesiae which may be very painful, but this is usually transient with resolution within 24 hours.<br>Systemic Poisoning: May cause dizziness , headache , nausea , vomiting , muscular twitching , abdominal pain , chest tightness , hypotension , bradycardia , convulsions , unconsciousness and coma (at very high doses) .<br>Treatment:<br>Local Contamination: Symptomatic after decontamination. For skin contamination apply Vitamin E cream or simple toilet milks. For eye contamination consider instillation of local anaesthetic (e.g. 1 % Amethocaine Hydrochloride) eye drops. Also, give Analgesics as necessary.<br>Systemic Poisoning: Carry out endotracheal intubation followed by gastric lavage with bicarbonate solution and activated charcoal and artificial respiration * (*as necessary) . Monitor the central nervous system , cardiac and respiratory function with particular reference to red blood cell and plasma cholinesterase levels and E.C.G . Check for pulmonary oedema in the event of inhalation.<br>Antidote: Atropine sulphate, 2mg I.V. (repeat until fully atropinised). Administer Diazepam I.V. for convulsions as necessary.<br>Recovery is normally spontaneous.<br>Further advice is available from; |

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### 4. FIRST-AID MEASURES (continued)

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Bayer Environmental Science via the emergency telephone number above or from the nearest Poisons Unit.

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### 5. FIRE-FIGHTING MEASURES

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|---|--|
| <b>Extinguishing Media</b>                    | Product is flammable. If product is involved in a fire, use waterspray, foam, dry powder, carbon dioxide or sand.  |
| <b>Unsuitable Extinguishing Media</b>         | None.  |
| <b>Special Exposure Hazards</b>               | May give off toxic fumes if burnt.   |
| <b>Protective Equipment for Fire-Fighting</b> | Do not breathe fumes. Wear self contained breathing apparatus.   |
| <b>Fire Fighting Guidance</b>                 | If possible and without risk, remove intact containers from exposure to fire. Otherwise, spray unopened containers with water to keep cool. Whenever possible, contain fire-fighting water by bunding area with sand or earth. |

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### 6. ACCIDENTAL RELEASE MEASURES

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|----------------------------------|--|
| <b>Personal Precautions</b>      | Avoid contact with spilled material or contaminated surfaces. If ordinary clothing becomes contaminated remove it immediately. When dealing with the spillage do not eat, drink or smoke and wear personal protective clothing as detailed in Section 8.   |
| <b>Environmental Precautions</b> | Keep people and animals away. Prevent entry into drains, sewers and watercourses. In the UK if spillage enters drains leading to sewage works inform local water company plc immediately. If spillage enters rivers or watercourses, inform the Environment Agency (emergency telephone number 0800 807060). Overseas, inform the appropriate authority immediately. |
| <b>Spillages</b>                 | Contain/absorb spillage in sand/earth or in a suitable inert material. Transfer collected material to heavy duty plastic drums and keep safe for disposal.   |
| <b>Note</b>                      | Check also for any local site procedures in force.   |

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### 7. HANDLING AND STORAGE

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|-----------------------------------|---|
| <b>Handling</b>                   | No specific precautions required when handling unopened containers; follow any relevant manual handling guidance. Refer to Section 8 if exposure to product is possible. Wash thoroughly with soap and water after handling and before eating, drinking or smoking. |
| <b>Storage</b>                    | Store in original packs/containers in a dry secure area designated for pesticides with access for authorised staff only. Store away from seeds, fertilizers and animal feedstuffs.  |
| <b>Technical Storage Measures</b> | Keep all ignition sources and sources of heat away.   |

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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|--|--|
| <b>Occupational Exposure Standards</b> |  |
| 1. <b>Product</b>                      | None assigned.   |
| 2. <b>Solvent</b>                      | Supplier recommendation for solvent is 100 ppm.  |
| <b>Engineering Control Measures</b>    | Refer to any applicable COSHH assessments. Engineering controls should be used where practicable in preference to personal protection.                           |
| <b>Respiratory Protection</b>          | Wear respirator conforming to EN 140 with A1 filters; follow respirator manufacturer's recommendations or instructions.  |
| <b>Hand Protection</b>                 | Wear chemical resistant PVC or nitrile gloves.   |
| <b>Eye Protection</b>                  | Wear safety goggles with unperforated side shield or goggles (conforming to BS EN 166 or BS 2092 for older goggles).   |
| <b>Other</b>                           | Wear PVC or chemical resistant disposable overalls and PVC boots.  |
| <b>Other Information</b>               | If feasible, decontaminate protective clothing before removal. Where decontamination is not feasible (before or after removal) dispose of as contaminated waste. |

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

|                                      |  |
|--------------------------------------|--|
| Physical State                       | Liquid.  |
| Colour                               | Amber.   |
| Odour                                | Characteristic.  |
| pH                                   | No data.   |
| Boiling Range/Point (deg C)          | Not determined.  |
| Melting Point/Freezing Point (deg C) | Not determined.  |
| Flash Point (deg C)                  | 50 to 52   |
| Explosion Limits (%)                 | No data.   |
| Solubility in Water                  | Emulsifies.  |
| Vapour Pressure                      | No data.   |
| Density (g/ml)                       | 1.08 at 20 °C.   |
| Flammability                         | Flammable  |
| Auto-flammability (deg C)            | No data.   |
| Explosive Properties                 | None.  |
| Oxidising Properties                 | None.  |
| Vapour Density (Air = 1)             | No data.   |
| Dust Explosion Data                  | Not applicable   |
| Summary/Other Data                   | Flammable liquid the vapour of which may form an explosive mixture with air. |

### 10. STABILITY AND REACTIVITY

|                     |                                   |
|---------------------|-----------------------------------|
| Stability           | Stable at ambient conditions.     |
| Conditions to Avoid | Sources of ignition.              |
| Materials to Avoid  | Acids. Alkalis. Oxidising agents. |

### 11. TOXICOLOGICAL INFORMATION

|                       |   |
|-----------------------|---|
| Inhalation            | High concentrations of solvent vapour may cause narcosis. Vapour may be irritating to the respiratory tract.  |
| Skin and Eye Contact  | Harmful in contact with skin; rat dermal LD50 > 2000 mg/kg. Irritating to rabbit skin. Not irritating to rabbit eyes. Negative in a guinea pig skin sensitisation test. |
| Ingestion             | Harmful if swallowed; rat oral LD50 316 mg/kg.<br>Harmful: may cause lung damage if swallowed.  |
| Carcinogenicity       | No data.  |
| Genotoxicity          | No data.  |
| Reproductive Toxicity | Data given in this section are for the active ingredient:<br>Not teratogenic.   |

### 12. ECOLOGICAL INFORMATION

|                           |   |
|---------------------------|---|
| Mobility                  | Data given in this section are for the active ingredient:<br>Does not leach to groundwater under normal conditions.   |
| Persistence/Degradability | Data given in this section are for the active ingredient:<br>Soil DT50 60 to 120 days. Water DT50 1.5 days (pH 8.0 @ 25 deg. C), 100 days (phosphate buffer, pH 7.0 @ 15 deg. C). |
| Bio-accumulation          | Data given in this section are for the active ingredient:<br>Log P = 4.7.   |

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### 12. ECOLOGICAL INFORMATION (continued)

|                         |   |
|-------------------------|---|
| <b>Aquatic Toxicity</b> | Data given in this section are for the active ingredient:<br>96 hr LC50 rainbow trout 0.003 mg/l, roach 0.25 mg/l, 48 hr EC50 daphnia 1.7 microgram/l . |
| <b>Other Toxicity</b>   | Data given in this section are for the active ingredient:<br>Acute oral LD50 chickens 32 to 102 mg/kg. Toxic to the following species; bees .           |



### 13. DISPOSAL CONSIDERATIONS

|                           |   |
|---------------------------|---|
| <b>Product Disposal</b>   | Disposal of product would usually be by incineration in an appropriately licensed commercial incinerator. Advice may be obtained from the local waste regulation authority (part of the Environment Agency in the UK). In the UK disposal arrangements should be in accordance with the Duty of Care Regulations and, where applicable, with the Special Waste Regulations. |
| <b>Container Disposal</b> | Lightly contaminated packaging may be acceptable for landfill, otherwise incineration will be required. See above for advice.   |

### 14. TRANSPORT INFORMATION

|                                    |  |
|------------------------------------|--|
| <b>UN Number</b>                   | 3017   |
| <b>UN Proper Shipping Name</b>     | Organophosphorus pesticide, liquid, toxic, flammable (contains chlorpyrifos 44.7 % and petroleum distillates )   |
| <b>UN Class</b>                    | 6.1  |
| <b>UN Packaging Group</b>          | III  |
| <b>ADR/RID - Description</b>       | 3017, Organophosphorus pesticide, liquid, toxic, flammable (contains chlorpyrifos 44.7 % and petroleum distillates ) , 6.1, 72*(c), ADR  |
| <b>CDG(CPL) - Description</b>      | 3017, Organophosphorus pesticide, liquid, toxic, flammable (contains chlorpyrifos 44.7 % and petroleum distillates ) .<br>Class: 6.1.<br>Hazard Identification Number: 63<br>Packing Group: III. |
| <b>IMDG - Proper Shipping Name</b> | As for UN + marine pollutant symbol used where appropriate.  |
| <b>IMDG - Ems Number</b>           | 6.1 - 01   |
| <b>IMDG - MFAG Table Number</b>    | 505  |
| <b>ICAO - Proper Shipping Name</b> | As for UN.   |

### 15. REGULATORY INFORMATION

|  |   |  |
|--|---|--|
| <b>Risk symbol</b>   |  Flammable   |  Harmful |
| <b>Hazard Classification</b>                               | Flammable<br>Xn - Harmful   |  |
| <b>Designated Name</b>                                     | Crossfire 480 (contains chlorpyrifos 480 g/l )  |  |
| <b>R phrases</b>   | 10-Flammable. 21/22-Harmful in contact with skin and if swallowed. 38-Irritating to skin. 65 - Harmful : may cause lung damage if swallowed.  |  |
| <b>S phrases</b>   | 23-Do not breathe fumes/vapour/spray. 28-After contact with skin, wash immediately with plenty of: soap and water. 36/37/39-Wear suitable protective clothing, gloves and eye/face protection. 45-In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).               |  |
| <b>Control of Pesticides Regulations 1986: Precautions</b> | Chlorpyrifos is an anticholinesterase organophosphorus compound. DO NOT USE if under medical advice NOT to work with such compounds.<br>WEAR SUITABLE PROTECTIVE GLOVES when handling the concentrate.<br>WHEN USING DO NOT EAT, DRINK OR SMOKE.<br>WASH CONCENTRATE from skin or eyes immediately.<br>DO NOT BREATHE SPRAY |  |

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### 15. REGULATORY INFORMATION (continued)

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WASH HANDS AND EXPOSED SKIN before meals and after work.  
KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.  
KEEP OUT OF REACH OF CHILDREN.  
IF SWALLOWED do not induce vomiting, seek medical advice immediately and show this container or label.  
DANGEROUS TO BEES. Do not apply to crops in flower, nor to those in which bees are actively foraging. Do not apply when flowering weeds are present.  
EXTREMELY DANGEROUS TO FISH OR OTHER AQUATIC LIFE. Do not contaminate surface waters or ditches with chemical or used container.  
DO NOT ALLOW DIRECT SPRAY from ground crop sprayers to fall within 5 m of the top of the bank of a static or flowing water body, or within 1 m of the top of a ditch which is dry at the time of application. DO NOT ALLOW DIRECT SPRAY from hand held sprayers to fall within 1 m of the top of a bank of a static or flowing water body. THIS PRODUCT IS NOT ELIGIBLE FOR BUFFER ZONE REDUCTION UNDER THE LERAP SCHEME.  
KEEP IN ORIGINAL CONTAINER, tightly closed in a safe place.  
WASH OUT CONTAINER THOROUGHLY, empty washings into spray tank and dispose of safely.  
DO NOT RE-USE CONTAINER for any purpose.  
IF YOU FEEL UNWELL, seek medical advice (show label where possible)

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### 16. OTHER INFORMATION

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**MSDS first issued** 8 December 2000

**MSDS data revised**

**Footnote**

This Safety Data Sheet was prepared in compliance with Commission Directive 93/112/EC, 67/548/EEC and 88/379/EEC as well as their relevant amendments, on the approximation of laws, regulations and administrative provisions relative to the classification, packaging and labelling of dangerous substances and preparations.

**Disclaimer**

The above information is intended to give general health and safety guidance on the storage and transport of the substance or product to which it relates. It is not intended to apply to the use of the substance or product for which purposes the substance or product label and any appropriate technical usage literature available should be consulted and any relevant licences, consents or approvals complied with. The requirements or recommendations of any relevant site or working procedure, system or policy in force or arising from any risk assessment involving the substance or product should take precedence over any of the guidance contained in this safety data sheet where there is a difference in the information given. The information provided in this safety data sheet is accurate at the date of publication and will be updated as and when appropriate. No liability will be accepted for any injury loss or damage resulting from any failure to take account of information or advice contained in this safety data sheet.

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