

SECTION 1 - PRODUCT & COMPANY IDENTIFICATION

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| ARYSTA LifeScience South Africa (Pty) Ltd Co. Reg. No.: 2009/019713/07 7 Sunbury Office Park, off Douglas Saunders Drive La Lucia Ridge, 4019 | Tel: 031 514 5600 Fax: 031 514 5611 e-mail: info@arysta.co.za Web address: arystalifescience.co.za |
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Product Name: Triclon 480 EC
Product Use: Herbicide
Creation Date: November 2011

24 Hr Emergency Number: 082 771 2712
In case of Poisoning:
Poison Information Centre: 082 446 8946
Tygerberg Hospital: (021) 931 6129
Poison Emergency Enquiries: (021) 689 5227
In case of Spillage:
HAZMAT: 0800 147 112

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

Common Name: Triclopyr
Chemical Name: Triclopyr ((3,5,6-trichloro-2-pyridinyl) oxy) acetic acid, butoxy ethyl ester
Chemical family: Pyridinecarboxylic acid

Hazardous ingredients of toxicological concern:

| <u>Inert:</u> | <u>% present:</u> |
|---------------|-------------------|
| Triclopyr | > 10 % v/v |

Symbol: Xn, N
Indication of Danger: Harmful, Environmentally Hazardous Substance

RISK-PHRASE(S) R22, R36, R37, R48/22, R50/53

SECTION 3 - HAZARD IDENTIFICATION

Skin contact: Irritating to skin. May cause sensitization by skin contact.
Ingestion: Harmful if swallowed.
Harmful to aquatic organisms.
Combustible.

SECTION 4 - FIRST AID MEASURES AND PRECAUTIONS

Inhalation: Remove to fresh air if effects occur. Consult a physician.
Skin contact: Wash off in flowing water or shower
Eye contact: Flush eyes with plenty of water.
Ingestion: Do not induce vomiting. Call a physician and/or transport to emergency facility immediately. The decision of whether to induce vomiting or not should be made by an attending physician.

NOTE TO PHYSICIAN:

If lavage is performed, endotracheal and/or oesophageal control is suggested. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

SECTION 5 - FIRE-FIGHTING MEASURES

Flash point: 64 °C (TCC)
Fire & Explosion Hazards: Combustible. Toxic, irritating vapors may be produced if product is involved in fire.
Hazardous Combustion Products: Nitrogen oxides. Hydrogen chloride. Phosgene. Dependent on the intensity of the fire.
Extinguishing Media: Water fog, foam, CO₂, and dry chemical.
Fire Fighting Protective Equipment: Use positive pressure self-contained breathing apparatus and full protective clothing.

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SECTION 6 - ACCIDENTAL RELEASE MEASURES (SPILLAGE)**Environmental Precautions**

Do not wash into sewers or into any body of water. Advise water authority if spillage has entered water course or drainage system.

Methods of cleaning up

Soak up with sand or other non-combustible absorbent material and place into containers for disposal. For large spills, barricade area and consult manufacturer. If further assistance is required, telephone the emergency contact number.

SECTION 7 - HANDLING AND STORAGE REQUIREMENTS**HANDLING:**

Keep out of reach of children. Do not use near heat or open flame. Harmful if swallowed, inhaled, or absorbed through skin. Avoid contact with eyes, skin and clothing. Avoid breathing mists and vapors. Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. For handling relative to end-use of this product, read the product label for further information concerning the use of personal protective equipment (PPE) under the Worker Protection Standard of 1993.8.

STORAGE:

Product should be stored in compliance with local regulations. Store in a cool, dry, well-ventilated place in the original container. Protect from excessive heat and cold. Do not store near food, drink, animal feeding stuffs, pharmaceuticals, cosmetics or fertilisers. Keep out of reach of children.

SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

Comply with occupational safety, environmental, fire, and other applicable regulations.

Exposure Guidelines:**3,5,6-Trichloro-2- pyridinyloxyacetic acid, Butoxyethylester:**

Guideline is 2 mg/m³ as acid equivalent, Skin.

Kerosene:

Guideline is 10 mg/m³.

Engineering Controls:

Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

PERSONAL PROTECTIVE EQUIPMENT:

Respiratory Protection: Atmospheric levels should be maintained below the exposure guidelines. When respiratory protection is required for certain operations, use a NIOSH approved air-purifying respirator.

Skin Protection:

For handling prior to end-use of this product, no precautions other than clean, body-covering clothing should be needed for brief contact. Use gloves impervious to this material when prolonged or frequently repeated contact could occur. For handling relative to end-use of this product, the Worker Protection Standard of 1993 requires that applicators and other handlers must wear long-sleeved shirt and long pants; chemical-resistant gloves such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber, or Viton; and shoes and socks. Remove clothing immediately if herbicide gets inside. Then wash thoroughly and put on clean clothing. Follow manufacturer's instructions for cleaning/maintaining personal protective equipment (PPE). If there are no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Eye Protection:

Use safety glasses.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

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| Appearance: | Amber |
| Odour: | Kerosene-like |
| Vapour density: | > 1 |
| Appearance: | liquid |
| Density: | 1.08 g/l |
| Flash point: | 64°C |
| Solubility in water: | Emulsifies in water. |
| Boiling Point: | 150°C |

SECTION 10 - STABILITY AND REACTIVITY

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| Conditions to Avoid: | Combustible. Avoid sources of ignition if temperature is near or above flash point. |
| Incompatibility: | (Specific Materials To Avoid) Acid, base, and oxidizing material. |
| Hazardous Decomposition Products: | Nitrogen oxides, hydrogen chloride, and Phosgene May Result Under Fire Conditions. |
| Hazardous Polymerization: | Will not occur. |

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SECTION 11 - TOXICOLOGICAL INFORMATION**Ingestion:**

Single dose oral toxicity is considered to be moderate. The oral LD50 for rats is 1100 mg/kg.

Skin Contact

The dermal LD50 for rats is >2000mg/kg. A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts. Short single exposure may cause skin irritation.

Skin Sensitisation

Known or suspected skin sensitiser.

Eye Contact:

May cause slight eye irritation.

Inhalation:

No adverse effects anticipated by this route of exposure incidental to proper handling.

SECTION 12 - ECOLOGICAL INFORMATION**ECOTOXICOLOGY:****Fish:**

Acute LC50 for fathead minnow (*Pimephales promelas*) is 2.2 - 6.3 mg/L.

Material is moderately toxic to fish on an acute basis (LC50 between 1 and 10 mg/L).

Daphnia:

Acute LC50 for water flea (*Daphnia magna*) is 2.2 mg/L.

Material is moderately toxic to aquatic invertebrates on an acute basis (LC50 between 1 and 10 mg/L).

Algae:

Growth inhibition EC50 for green alga (*Selenastrum capricornutum*) is 13.3 mg/L based on cell count, 16.8 mg/L based on cell vol.

Environmental Fate:**Movement & Partitioning:**

Bio concentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

Log octanol/water partition coefficient (log Pow) is 4.09. Log air/water partition coefficient (log Kaw) is -4.0.

Degradation & Persistence:

Biodegradation under aerobic static laboratory conditions is moderate (BOD20 or BOD28/ThOD between 10 and 40%).

SECTION 13 - DISPOSAL CONSIDERATION

Very toxic to aquatic organisms. Do not contaminate rivers, dams or any other water source with chemical or used containers. Drain and triple rinse containers and then destroy by perforation and flattening. Bury in an approved dumping site. Do not re-use containers for any other purpose.

SECTION 14 - TRANSPORT INFORMATION

UN No.: 3082

ADR Road

Shipping name: Environmentally hazardous substance, liquid, n.o.s (contains triclopyr 480 g/l)

Class: 9

Packaging group: III

Hazard ID: 90

Air (IATA)

Shipping name: Environmentally hazardous substance, liquid, n.o.s (contains triclopyr 480 g/l)

Class: 9

Packing Group: III

Pack Instr. Passenger: 911

Pack Instr. Cargo: 911

Sea - IMO/MDG

Shipping name: Environmentally hazardous substance, liquid, n.o.s (contains triclopyr 480 g/l)

Packing Group: III

Tremcard No: 30GM6-III

This product is considered a Marine Pollutant.

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SECTION 15 - REGULATORY INFORMATION

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| Hazard Symbol: | Xn, N |
| Indication of Danger: | Harmful, Dangerous for the Environment |
| Risk Phrases: | |
| R22 | Harmful if swallowed |
| R38 | Irritating to skin |
| R43 | May cause sensitisation by skin contact |
| R50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment |
| R65 | Harmful: may cause lung damage if swallowed |
| Safety Phrases : | |
| S24 | Avoid contact with skin |
| S35 | This material and its container must be disposed of in a safe way |
| S37 | Wear suitable gloves |
| S57 | Use appropriate containment to avoid environmental contamination |
| S62 | If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label |

SECTION 16 - OTHER INFORMATION**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.

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