




Agritech Bioscience (Pty) Ltd. t/a Carabiner

Material Safety Data Sheet

Trimax E Reg. No: L7666 (Act 36 of 1947)

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1) IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER.	
Product name:	TRIMAX E
UN number:	3082
Other means of identification Recommended use:	Triclopyr butoxy ethyl ester 480 g/L Herbicide
Restrictions on use:	Agriculture
Distributed by:	AGRITECH BIOSCIENCE P O BOX 436 MODDERFONTEIN TEL 011 8228509 FAX 0866901386 MOBILE: 0834006056
Emergency Number:	POISON CENTRE (UNITAS HOSPITAL) 012 664 1100 TYGERBERG:021 931 6129 RED CROSS: 021 689 5227 RAPID SPILL RESPONSE 0800 775 3305 GRIFFON POISON CENTRE: 082 446 8946.
Chemical Name:	3,5,6-trichloro-2-pyridyloxyacetic acid (IUPAC)
2) Classification of the substance / mixture:	
Classification of the product is based on the co-formulants listed in section 3.	Xn, N; R22, R36/38, R38, R43, R50/53, R65 Full text of R-phrases: see section 15.
Label elements:	Hazard symbols: Xn – Harmful N – Dangerous for the environment  Signal word: Harmful
Health effects: eyes:	May cause moderate irritation.
Health effects: skin:	May cause moderate irritation.
Health effects: ingestion	Harmful if swallowed.
Health effects: inhalation	Harmful if inhaled.

Unlikely to cause harmful effects under normal conditions and use May cause irritation.

3) COMPOSITION / INFORMATION ON INGREDIENTS:

Mixture:

Chemical name	% composition	CAS No.	EC No.	Classification according to Regulation EC 1272/2008 (CLP)	Classification according to 67/548/EEC
Triclopyr butoxy ethyl ester	48%	64700-56-7	265-024-8	<p>Acute Tox. 4: H302 (Harmful if swallowed)</p> <p>Skin Sens. 1B: H317 (May cause an allergic skin reaction)</p> <p>Aquatic Chronic 1: H 410 (Very toxic to aquatic life with long-lasting effects)</p> <p>Skin Irrit. 2: H315 (Causes skin irritation)</p> <p>Aquatic Acute 1: H400 (Very toxic to aquatic life)</p>	<p>Xn;</p> <p>R22</p> <p>R36/38</p> <p>R43.</p> <p>S2</p> <p>S13</p> <p>S20/21</p> <p>S24</p> <p>S36/37/39</p> <p>S45</p> <p>S46</p> <p>S62</p>

Full text of symbols, R-phrases and S-phrases: see section 15.

4) First Aid Measures:

Inhalation:	Remove patient to fresh air. Loosen clothing around neck. Lie down and keep warm and at rest. If breathing has stopped, perform artificial respiration. Seek medical assistance if necessary.
Skin contact:	Remove contaminated clothing and footwear immediately flush body with large amounts of water. Wash affected areas with soap and water. Do not rub skin. Persons providing first aid care must wear gloves to avoid self-contamination. Seek medical assistance if irritation persists.
Eye contact:	Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Seek medical assistance if irritation persists.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Drink large quantities of water if able to do so. Maintain blood pressure and airway. Give oxygen if respiration is depressed. For advice, contact the National Poisons Centre. Seek medical assistance immediately and show this data sheet. Administration of gastric lavage or oxygen should be performed by qualified medical personnel.
Most important symptoms and effects, acute and delayed:	None known

Indication of immediate medical attention and special treatment needed: Advice to physician	No specific antidote known. Treat symptomatically and supportively. Danger of lung aspiration should be weighed against toxicity when considering emptying the stomach.
5) Fire-Fighting Measures:	
Flash point: Extinguishing Media: Unsuitable extinguishing media: Special hazards arising from the substance or mixture: Fire Fighting:	<p>> 60 °C</p> <p>Small fires: Carbon dioxide, dry chemical foam or standard foam. Large fires: Fine water spray, foam, carbon dioxide. Do not use high volume water jet, due to contamination risk.</p> <p>Water jet, due to contamination/spreading risk.</p> <p>In the event of fire, poisonous and corrosive fumes containing: carbon monoxide, nitrogen oxides may be released.</p> <p>Remove spectators from surrounding area. Isolate the fire area and evacuate downwind. Use a recommended extinguishing agent for the type of surrounding fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Contain fire control agents for later disposal. Avoid inhaling hazardous vapours and fumes from burning materials. Keep upwind. Remove container from fire area if possible and without risk. If the area is heavily exposed to fire, and if conditions permit, let the fire burn itself out since water may increase the area contaminated (on small fires). Water can be used to cool unaffected containers but must be contained for later disposal. Do not scatter the material. Avoid pollution of waterways. Do not extinguish the fire until the flow of product has been stopped. Keep upwind.</p> <p>Generating poisonous and corrosive fumes containing: carbon monoxide, nitrogen oxides.</p> <p>UNUSUAL FIRE OR EXPLOSION HAZARDS: Combustion products are toxic and/or irritant. Solvent vapours may travel to a source of ignition and create a flash back vapour explosion hazard indoors, outdoors, or in sewers.</p>
Protective clothing:	Full protective clothing and self-contained breathing apparatus
6) Accidental Release Measures:	
Personal precautions:	Avoid contact with skin and eyes. Do not breathe in spray or fumes. For personal protection see Section 8. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke. Wash contaminated clothing before re-use.

<p>Environmental precautions:</p> <p>Cleaning procedure:</p> <p>Disposal:</p>	<p>Do not contaminate waterways, drains and groundwater. If contamination of waterways, drains, rivers or lakes is unavoidable, warn the local authorities (Police and Department of Water/Environmental affairs) immediately.</p> <p>Wear protective clothing, eye protection, chemically resistant gloves and boots. Clear area of unprotected personnel. Spills may be slippery and should be cleaned up immediately. Remove all sources of flame and sparks.</p> <p>Contain and absorb liquid spills with inert material such as sand, soil, diatomaceous earth etc., remove by scoop or vacuum. Use approved industrial vacuum cleaner for removal and place in specially marked, tightly closing waste containers. Keep away from heat and sources of ignition. Wash area with water and detergent and absorb with further inert material. Heavily contaminated soil layers have to be dug out down to clean soil. If spill does enter waterways contact the local authority. Spilled product cannot be re-used and must be disposed of by incineration or disposal in a chemical waste disposal facility. If containers cannot be recycled, they should be disposed of together with the waste chemical.</p> <p>Used absorbent material and washings should be stored in labelled, sealable containers until these can be disposed of according to local regulations. Open burning or dumping of this material is prohibited.</p>
<p>7) Handling & Storage:</p>	
<p>Handling:</p> <p>Storage:</p>	<p>Avoid skin and eye contact and inhalation of spray mist. Use good personal hygiene. Wash hands and exposed skin before eating, drinking or smoking. Avoid skin and eye contact.</p> <p>APPROVED HANDLER: This product must be under the control of an approved handler when applied in a wide dispersive manner; or used by a commercial contractor.</p> <p>BEWARE: Spray drift hazard. Apply this product carefully. Spray drift may cause serious damage to other desirable plants.</p> <p>Store in the original container tightly closed and in a locked, dry, cool, well-ventilated storage area away from foodstuffs, fertilisers and seeds. Keep away from children or uninformed persons. Avoid keeping product in extreme temperatures and direct sunlight. Avoid heat and sources of ignition. Avoid strong basic, acidic or oxidising materials.</p>
<p>8) Exposure Control / Personal Protection:</p>	
<p><u>Occupational exposure limits:</u></p>	<p>No data available.</p>
<p><u>Engineering controls:</u></p>	<p>It is essential to provide adequate ventilation. The measures appropriate for a particular work site</p>

<p>PERSONAL PROTECTIVE EQUIPMENT:</p> <p>Clothing:</p> <p>Gloves:</p> <p>Eye protection:</p> <p>Emergency eye wash:</p>	<p>depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.</p> <p>Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance. Respiratory protection: Respirator with filter for organic vapour.</p> <p>Employee must wear appropriate chemical-resistant gloves to prevent contact with this substance</p> <p>Always use safety goggles.</p> <p>Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.</p>
<p>9) Physical & Chemical Properties:</p>	
<p>Form:</p>	<p>Liquid</p>
<p>Colour:</p>	<p>Yellow to brown</p>
<p>Odour:</p>	<p>Mild characteristic odour</p>
<p>Odour threshold:</p>	<p>No data available</p>
<p>Solubility:</p>	<p>Emulsifies in water</p>
<p>pH:</p>	<p>3 - 7 (1 %; in deionised water)</p>
<p>Melting point / Freezing point</p>	<p>No data available</p>
<p>Initial boiling point and boiling range</p>	<p>150 °</p>
<p>Flash point:</p>	<p>64°C</p>
<p>Evaporation rate:</p>	<p>No data available</p>
<p>Flammability (solid, gas)</p>	<p>Flammable</p>
<p>Upper/ lower flammability or explosive limits:</p>	<p>No data available</p>
<p>Vapour pressure:</p>	<p>No data available</p>
<p>Vapour density:</p>	<p>>1 (air = 1)</p>
<p>Relative density:</p>	<p>Approx. 1.08 g/L</p>
<p>Partition coefficient: n-octanol/water</p>	<p>No data available</p>
<p>Auto-ignition temperature:</p>	<p>No data available</p>
<p>Viscosity:</p>	<p>No data available</p>
<p>10) Stability & Reactivity:</p>	
<p>Reactivity:</p>	<p>No data available</p>
<p>Stability:</p>	<p>When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture. Avoid strong basic, acidic or oxidising materials.</p>

<p>Hazardous decomposition product(s):</p> <p>Conditions to avoid:</p> <p>Incompatible materials:</p>	<p>None under normal storage and use conditions. Heating can release vapours or cause container to burst. Combustion products are toxic and/or irritant.</p> <p>Extreme temperatures. Closed containers may explode due to pressure build-up when subjected to excessive heat or intense fire.</p> <p>Strong basic, acidic or oxidising materials.</p>
<p>11) Toxicological Information:</p>	
<p>Oral : LD50 > 1 000 mg/kg, rat. Dermal : LD50 > 2 000 mg/kg, rat. Inhalation : LC50 (4h) > 255 ppm, rat.</p> <p>Skin irritation: Mild irritant, rabbit. Eye irritation : Mild irritant, rabbit. Sensitization : Did not cause sensitization on laboratory animals.</p>	
<p>12) Ecological Information:</p>	
<p>Bees : LD50 Contact >100 µg/bee, non toxic. Birds : LD50 /10 days/ Mallard ducks > 2000 mg/kg. Dietary LC50 (8d) Bobwhite quail >2900 mg/kg, Japanese quail >3200 mg/kg, Mallard ducks >5 000 mg/kg diet. Fish : LC50 (96h) Rainbow trout <1.0 mg/L Daphnia : LC50 (48h) > 0.02 mg/L. Algae : EC₅₀ / 72 hr: 0.43 mg/L.</p> <p>Persistence: Fairly rapidly degradation in soil by microbial activity, DT₅₀ (ave.) 46 days. Major degradation product , DT₅₀ 30–90 days. Does not bio-accumulate. According to the results of tests of biodegradability this product is readily biodegradable by hydrolysis in soil and water.</p> <p>Biodegradation: Biodegradation rate is high.</p> <p>Bioaccumulative potential: Does not bioaccumulate.</p>	
<p>13) Disposal Considerations:</p>	
<p>Waste Disposal : : In accordance with local and national regulations. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved chemicals waste disposal facility. Spilled product cannot be re-used and must be disposed of.</p> <p>Container Disposal : Refer to the product label for instructions. Container Refilling and Disposal: If the container is to be refilled, do not rinse with any material or introduce any pesticide other than this product. If the containers cannot be recycled, they should be disposed of together with the waste chemical. DO NO REUSE THE CONTAINER FOR ANY OTHER PURPOSE. Do not transport if this container is damaged or leaking.</p>	
<p>14) Transportation Information:</p>	
<p>UN NUMBER: 3082 SYMBOLS: Xn Road Transport ADR/ RID: Class: 9 Packaging group: III Labelling no: 9 Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, marine pollutant. (triclopyr butoxy ethyl ester) Special precautions:</p>	

Maritime Transport IMDG / IMO:

Class: 9

Packaging group: III

Labelling no: 9

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, marine pollutant. . (triclopyr butoxy ethyl ester)

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC code): NA

Special precautions: NA

Environmental hazard: Yes

Air Transport ICAO/ IATA:

Class: 9

Packaging group: III

Labelling no: 9

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, marine pollutant. . (triclopyr butoxy ethyl ester)

Considered a marine pollutant.



15) Regulatory Information:

Safety, health and environmental regulations / legislation specific for the substance or mixture.

To avoid risks to man and the environment, comply with all instructions for use.

Advice on handling of the product can be found in sections 7 and 8 of this safety data sheet.

Symbol(s): Xn, N

Signal words:

Xn – Harmful

N – Dangerous for the environment

R-phrases(s):

R22 – Harmful if swallowed.

R36/38 – Irritating to eyes and skin.

R38 – Irritating to skin.

R43 – May cause skin sensitization by 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.

S-phrases(s):

S1/2 - Keep locked up and out of the reach of children.

S2 - Keep out of reach of children.

S13 – Keep away from food, drink and animal feeding stuffs.

S20/21 – When using, do not eat drink or smoke.

S24 – Avoid contact with skin.

S24/25 - Avoid contact with skin and eyes.

S29/35 - Do not empty into drains; dispose of this material and its container in a safe way.

S36/39 - Wear suitable protective clothing and eye/face protection.

S36/37/39 – Wear suitable protective clothing, gloves and eye/face protection.

S45 – In case of accident or if you feel unwell, seek medical advice immediately.

S46 –If swallowed, seek medical advice immediately and show this container.

S61 - Avoid release to the environment. Refer to special instructions/safety data sheets.

S62 – If swallowed, do not induce vomiting; seek medical advice immediately

Harmful Statements:

H302 - Harmful if swallowed

H317 - May cause an allergic skin reaction

H410 - Very toxic to aquatic life with long-lasting effects

H315 - Causes skin irritation
H400 - Very toxic to aquatic life

16. Other Information

All information and instructions provided in this Safety Data Sheet (SDS) are based on the current state of scientific and technical knowledge at the date indicated on the present SDS and are presented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear.

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