

Safety Data Sheet (SDS) XTI SCX/02

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According to UN GHS 9th Ed
Revision Date: 2022/04/14

First print date: 2017/03/03

Version: 1.2

SECTION 1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY/UNDERTAKING

Product identifier:

Identification as on the label/Trade name: **X-TINCT[®] 500SC**

Additional information: Product code XTISC/02

Relevant identification uses of the substance and uses advised against:

Identified uses: Herbicide.

Uses advised against: Use only as directed.

Details of the supplier of the Safety Data Sheet:

AECI Limited
14 Field Road, LILANTON

Emergency telephone numbers:

Griffon Poison information centre: 082 446 8946
Poisons Information Helpline: 0861 555 777
AECI Limited: (011) 823 8000 (o/h) Spill Tech: 086 100 0366 (a/h)

SECTION 2. HAZARD IDENTIFICATION

Classification of the substances or mixture

The mixture is classified according to

SANS 10234:2019, Regulation EC 1272/2008 [EU-GHS/CLP]	
Hazard classes/Hazard categories	Hazard statement
Acute toxicity oral (Category 4)	H302
Acute toxicity inhalation (Category 4)	H332
Carcinogenicity (Category 2)	H351
Specific Target Organ Toxicity repeated exposure (Category 1)	H372
Hazardous to the aquatic environment (Acute 1)	H400
Hazardous to the aquatic environment (Chronic 1)	H410

For full text of H statements see section 16

The most important adverse effects

The most important adverse physiochemical effects: None.

The most important adverse human health effects: May be harmful if swallowed or if inhaled.

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Label elements

Hazard pictograms:



Signal Word: Danger

Hazard Statements: H332 Harmful if inhaled. H351 Suspected of causing cancer. H372 Causes damage to organs through prolonged or repeated exposure. H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements: P102 Keep out of reach of children. P201 Obtain special instruction before use. P261 Avoid breathing fumes, mists, vapours or spray. P262 Do not get in eyes, on skin, or on clothing. P264 Wash contacted areas thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P273: Avoid release to the environment. P281 Use personal protective equipment as required. P363 Wash contaminated clothing before reuse. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P333+P313 If skin irritation or rash occurs: Get medical advice. P337+P313 If eye irritation persists: Get medical advice.

Special labelling of certain mixtures: None.

Other hazards: None.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Ingredients: Classification is based on the following ingredients which may be present.

Substance name (IUPAC/EC)	CAS –No.	Concentration % by weight	Classification
	EC-No.		EC1272/2008
Ethylene glycol mono	107-21-1	1-10%	Acute toxicity oral (Category 4) H302.
	203-473		
Paraquat dichloride tech (45%)	1910-42-5	1-10%	Acute toxicity oral, dermal (Category 3) H301+H311. Acute toxicity inhalation (Category 2) H330. Skin irritation (Category 2) H315. Eye irritation (Category 2) H319. STOT SE 3 H335. STOT RE 1 H372. Aquatic acute 1 H400. Aquatic chronic 1 H410
	217-615-7		
Diuron tech	330-54-1	30-40%	Acute toxicity oral (Category 4) H302. Carcinogenicity (Category 2) H351. STOT RE 2 H373. Aquatic acute 1 H400. Aquatic chronic 1 H410 (M=10)
	206-354-4		

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There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4. FIRST AID MEASURES

Description of first aid measures:

In case of inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

In case of skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention.

In case of eye contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Check for and remove any contact lenses. Get medical attention.

In case of ingestion Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention.

Most important symptoms and effects, both acute and delayed:

Inhalation: May cause respiratory irritation. Extreme exposure to spray droplets may cause nose bleeding.

Ingestion: Harmful if swallowed.

In contact: May causes skin irritation. Absorption through intact human skin is minimal; exposures can cause irritation and a delay in the healing of cuts and wounds; can cause temporary damage to nails.

Eye contact: May cause eye irritation.

Indication of any immediate medical attention and special treatment needed:

Treat symptomatically.

SECTION 5. FIRE -FIGHTING MEASURE

Extinguisher media:

Suitable extinguisher media: Carbon dioxide, dry powder or alcohol resistant foam.

SMALL FIRE: Extinguish small fires with carbon dioxide, dry powder, or alcohol-resistant foam.

LARGE FIRE: Water spray can be used for larger fires or cooling of unaffected stock but avoid the accumulation of polluted run-off from the site.

Unsuitable extinguishing media: Do not use high volume water jet, due to contamination risk.

Special hazards arising from the mixture:

Vapours may be toxic.

Advice for fire-fighters:

Suitable extinguisher media: Carbon dioxide, dry powder or alcohol resistant foam.

SMALL FIRE: Extinguish small fires with carbon dioxide, dry powder, or alcohol-resistant foam.

LARGE FIRE: Water spray can be used for larger fires or cooling of unaffected stock but avoid the accumulation of polluted run-off from the site.

Unsuitable extinguishing media: Do not use high volume water jet, due to contamination risk.

SECTION 6. ACCIDENTAL RELEASE

Personal precautions, protective equipment and emergency procedures:

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For non-emergency personnel: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

For emergency responders: Use an approved/certified respirator or equivalent, isolate the spill area and limit the access to emergency responders only. Avoid any contact with spilled material, use adequate protective clothes and gloves.

Environmental precautions:

Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapours, if any. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal.

Methods for containment and cleaning up:

For small spills Prevent entry into sewers, water courses, basements or confined areas, contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in well labelled container for disposal according to local regulations.

For large Contain spilled material if possible, if spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services.

Reference to other sections:

See section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See section 13 for information on disposal.

Additional information:

None.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas.

Protective measures: Observe directions on label and instructions for use.

Advice on general occupational hygiene: Do not eat drink or smoke when handling this product.

Conditions for safe storage, including incompatibilities:

Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Store product in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use.

Specific end uses:

Use as directed. Use original container.

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

Occupational exposure limits (OEL): No information available.

Biological exposure indices (BEI): No information available.

Additional exposure limits under the conditions of use: No information available.

Exposure control:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective OEL's if applicable. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Appropriate engineering controls: Provide sufficient mechanical (general and/or local exhaust) ventilation to avoid high vapour/mist concentration.

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Wear chemical goggles.

Hand protection: Use chemical resistant gloves. Examples of preferred glove barrier materials include Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, Polyvinyl alcohol, Polyvinyl chloride.

Body protection: Impervious clothing.

Respiratory protection: Respiratory protection such as an approved respirator must be used.

Environmental exposure controls: Prevent product from entry into sewers and water courses.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance (form): Homogeneous liquid.

Colour: Opaque green.

Odour: Characteristic odour.

Odour threshold: No information available.

pH (at concentration): 5.5-6.5

Melting point/range (°C): No information available.

Boiling point/range (°C): No information available.

Flash point (°C): No information available.

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Evaporation rate: No information available.

Flammability (solid, gas): No information available.

Ignition temperature (°C): No information available.

Upper/lower flammability/explosive limits: No information available.

Vapour pressure (20°C): No information available.

Vapour density: No information available.

Density: 1.18-1.19 g/cm³

Water solubility: Dispersible in water with distinct haze.

n-Octanol/Water partition coefficient: No information available.

Auto-ignition temperature: No information available.

Decomposition temperature: No information available.

Viscosity, dynamic (cPa s): 1200-1400 cPs

Physical hazards:

None.

Other information:

Fat solubility (solvent-oil to be specified): No information available.

Bulk density: No information available.

Dissociation constant in water (p Ka): No information available.

Oxidation-reduction potential: No information available.

SECTION 10. STABILITY AND REACTIVITY

Reactivity:

The product is stable under normal conditions.

Chemical stability:

Stable under normal storage conditions for 2 years.

Possibility of hazardous reactions:

Hazardous polymerization will not occur.

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Conditions to avoid:

No information available.

Incompatible materials:

Very strong acid/alkaline formulations.

Hazardous decomposition products:

Toxic vapours.

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution:

Non-human toxicological data: No Information available.

Excretion:

Paraquat dichloride

In rats, following oral administration, 76–90% of the dose was excreted in the faeces, and 11–20% in the urine. Paraquat does not bioaccumulate, with >90% of the dose eliminated in 72 hours.

Diuron:

In mammals, metabolism is principally by hydroxylation and dealkylation.

Information on toxicological effects:

Acute toxicity: X-TINCT[®] SC

Acute toxicity oral LD₅₀ for rat 854.9 mg/kg (calculated).

Dermal LD₅₀ for rat 21536 mg/kg (calculated).

Inhalation LC₅₀ (4 h) for rat 1.18 mg/ℓ (calculated).

Paraquat dichloride

Acute toxicity oral LD₅₀ for rat 129-1571 mg/kg, guinea pigs 22-80 mg/kg.

Dermal LD₅₀ for rat .911 mg/kg.

Inhalation No vapour toxicity, due to very low vapour pressure. Extreme exposure to spray droplets may cause nose bleeding.

Diuron

Acute toxicity oral LD₅₀ for rat >2000 mg/kg.

Dermal LD₅₀ for rat >2000 mg/kg.

Inhalation LC₅₀ (4 h) for rat >7 mg/ℓ.

Chronic toxicity: No information available.

Skin corrosion/irritation:

Paraquat dichloride and Diuron

Irritating to skin for rabbits.

Serious eye damage/irritation:

Paraquat dichloride

Irritating to eyes for rabbits.

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Respiratory or skin sensitization:

Paraquat dichloride and Diuron

Not a skin sensitizer (guinea pigs).

Germ cell mutagenicity: No information available.

Carcinogenicity: No information available.

Reproductive toxicity: No information available.

STOT-single exposure: No information available.

STOT-repeated exposure: No information available.

Aspiration hazard: No information available.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity:

Paraquat dichloride

Birds: Acute oral LD₅₀ for Bobwhite quail 175 mg/kg, mallard ducks 75 mg/kg. LC₅₀ (5 d) for Bobwhite quail 981 mg/kg diet, Japanese quail 970 mg/kg diet, Mallard ducks 4048 mg/kg diet and Ring necked pheasants 1468 mg/kg diet.

Fish: LC₅₀ (96 h) for Rainbow trout 26 mg/ℓ, and Mirror carp 135 mg/ℓ.

Daphnia: EC₅₀ (48 h) 6.1 mg/ℓ.

Algae: E_bC₅₀ (96 h) for green algae 0.10 mg/ℓ and E_rC₅₀ 0.28 mg/ℓ.

Bees: LD₅₀ (120 h) oral 15µg/bee, contact 70 µg/bee.

Worms: LC₅₀ (14 d) >1380 mg/kg soil.

Diuron

Birds: Oral LD₅₀ (14 d) for Bobwhite quail 1104 mg/kg. Dietary LC₅₀ for Bobwhite quail 1730 ppm, Japanese quail >5000 ppm, Mallard ducks 5000 ppm and Pheasants >5000 ppm diet.

Fish: LC₅₀ (96 h) for Rainbow trout 14.7 mg/ℓ, Sheepshead minnows 6.7 mg/ℓ and Fathead minnows 14 mg/ℓ.

Daphnia: EC₅₀ (120 h) for *Selenastrum capricornutum* 0.022 mg/ℓ.

Other aquatic spp.: EC₅₀ (7 d) *Lemna gibba* 0.0183 mg/ℓ, EC₅₀ (48 h) for brown shrimps 1 mg/ℓ, Scud 0.16 mg/ℓ.

Bees: Practically non-toxic to bees.

Worms: LC₅₀ (14 d) >400 mg/kg (based on studies with diuron metabolites).

Other beneficial spp.: LR₅₀ for *Typhlodromus pyri* and *Aphidius rhopalosiphii* >4.0 kg/ha.

Persistence and degradability:

Paraquat dichloride

Photochemical degradation occurs. Degradation products which have been isolated include 1-methyl-4-carboxypyridinium chloride and methylamine hydrochloride.

Bioaccumulative potential:

This product will not accumulate in the soil or water or cause long-term problems.

Mobility in soil:

Paraquat dichloride

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Paraquat is rapidly and strongly adsorbed to soil and sediment, resulting in complete deactivation. When desorbed, it is quickly degraded by soil micro-organisms (DT₅₀ of unadsorbed paraquat <1 w). The potential risk to leach into groundwater is negligible.

Diuron

In soil, enzymic and microbial demethylation of the nitrogen atom and hydroxylation at position 2 of the benzene ring occur. Duration of activity in soil is c. 4–8 months, depending on soil type and humidity; DT₅₀ 90–180 d

Results of PBT& vPvB assessment:

No information available.

Other adverse effects:

No information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

Consider suitable waste recycling, re-use or recovery options. Dispose of in accordance with municipal, provincial and national regulations. Waste Classification and Management Regulations (GN 634 of 2013). Dispose and or manage in accordance with the requirements contained in R634 Waste Classification & Management Regulations, R635 National Norms & Standards for the Assessment of Waste for Landfill Disposal and R636 National Norms & Standards for Disposal of Waste to Landfill.

Product/ packaging disposal:

Treat as hazardous waste and dispose of in accordance with municipal, provincial and national regulations.

SECTION 14. TRANSPORT INFORMATION

Information:

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number	3082	3082	3082
UN Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S (Diuron)	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S (Diuron)	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S (Diuron)
Transport hazard class:	9	9	9
Packaging group:	III	III	III
Marine pollutant:	Yes	Yes	Yes
Special precautions for user:	Not required	Not required	Not required
Transport in bulk according to MARPOL 73/78 Annex II and the IBC code	Not required	Not required	Not required

Inland waterways: Not required.

Emergency response information: No information.

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture:

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Relevant information regarding authorization: Occupational Health and Safety Act 1993. Regulation for Hazardous Chemical Agents, 2021. UN Recommendations on the Transport of Dangerous Goods Model Regulations Rev. 21 (2019), Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Rev 9, 2022.

ACGIH: American Conference of Governmental Industrial Hygienists (ACGIH)

Relevant information regarding restrictions: None.

EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP]

Other National regulations: National Road Traffic Act, 1996 (ACT NO. 93 of 1996).

SANS 10228:2012- The identification and classification of dangerous goods for transport by road and rail modes.

National Environmental Management: Waste Act 59 of 2008.

Chemical Safety Assessment carried out? No

SECTION 16. OTHER INFORMATION

Indication of changes:

All sections.

Relevant classification and H statements (number and full text):

Aquatic acute 1: Hazardous to the aquatic environment (Acute 1)

Aquatic chronic 1: Hazardous to the aquatic environment (Chronic 1)

STOT SE 3-Specific target organ toxicity single exposure (Category 3)

STOT RE 1: Specific target organ toxicity repeated exposure (Category 1)

STOT RE 2: Specific target organ toxicity repeated exposure (Category 2)

H302 Harmful if swallowed. H301+H311 Toxic if swallowed or in contact with skin. H315 Causes skin irritation. H319 Cause serious eye irritation. H330 Fatal if inhaled. H332 Harmful if inhaled. H351 Suspected of causing cancer. H335 May cause respiratory irritation. H372 Causes damage to organs through prolonged or repeated exposure. H373 May damage to organs through prolonged or repeated exposure. H401 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.

Training instructions:

Use as indicated on the label, special training may be required for application.

Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Notice to readers:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees.

This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.