



SAFETY DATA SHEET

Totril® Super Herbicide

Date of Issue: 20 May 2022

1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

Chemical name of active ingredient(s): Ioxynil
Recommended use: Herbicide.
A selective weedkiller for use in onions, garlic and fine turf grass

Supplier: UPL New Zealand Limited
PO Box 51584, Pakuranga
Auckland
Phone 0800 100 325
www.upl-ltd.com/nz

Emergency telephone number: 0800 CHEM CALL (0800 243 622) 24 Hours

2. HAZARDS IDENTIFICATION



Hazard Classification: 3.1D, 6.1D, 6.4A, 6.5B, 6.8B, 6.9B, 9.1A, 9.3C
Required identification Details: **Signal Word: WARNING**

Keep out of reach of Children.
Read label before use.

Combustible liquid.
Harmful if swallowed or in contact with skin.
Causes eye irritation.
May cause an allergic skin reaction.
Suspected of damaging fertility or the unborn child.
Very toxic to aquatic life.
Harmful to terrestrial vertebrates.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation Information on hazardous ingredients

Common name	CAS No	%
Ioxynil octanoate	3861-47-0	25.0
Hydrocarbon solvent	64742-94-5	64.0
Naphthalene (in hydrocarbon solvent)	91-20-3	2.0-4.0
Other ingredients	(Non-hazardous)	0.97

4. FIRST-AID MEASURES

Description of necessary first aid measures:

Inhalation: May cause dizziness, headache, sweating, vomiting, weakness and fever. Remove to fresh air. Apply artificial respiration if necessary. Get medical help if breathing difficulty persists

Ingestion:	Give a glass or two of water. If swallowed do NOT induce vomiting. For advice contact the National Poisons Centre 0800 POISON (800 764 766) or a doctor immediately. Never give anything by mouth to an unconscious person.
Skin contact:	If skin or hair contact occurs, remove contaminated clothing and wash with soap and water. If irritation persists see a doctor.
Eye contact:	If splashed in eyes, immediately flush with water for 15 minutes. If irritation persists see a doctor.
Notes to a physician:	Following ingestion, there is burning of the oral mucosa, hyper salivation, stomach cramps, vomiting & diarrhea. Other reported symptoms include convulsions, cerebral depression and mental confusion, with difficulty in speaking. A short period of myotonia is followed by muscular weakness, a general reduction in motor activity, ataxia and in co-ordination and gradual loss of reflexes. In severe cases coma may develop, followed by death. The pulse may be rapid and sometimes irregular with a low blood pressure. Ventricular fibrillation has been reported. Kidney & liver damage have been reported in animal experiments but not so far in man. The only known cases of Phenoxy acid poisoning are those from deliberate ingestion and no poisoning arising occupationally has ever been verified. No antidote is available and treatment should be symptomatic. Gastric lavage with medical charcoal in water is recommended.

5. FIRE-FIGHTING MEASURES

Hazchem:	3XE
Extinguishing media:	Water spray, foam, carbon dioxide (CO ₂), dry powder, sand.
Flammability:	Flammable liquid. Flashpoint 75°C, Auto-ignition temperature 465°C, Vapours form explosive mixtures in air.
Fire/Explosion Hazard:	NA
Hazardous thermal (de)composition products:	Oxides of carbon and nitrogen and compounds of iodine.
Fire Fighting Instructions:	Wear self-contained breathing apparatus, total protection required in enclosed areas. Flashback may occur along vapour trail.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Ensure suitable personal protection during removal of spillages. This means wearing eye protection, chemically resistant gloves, boots and overalls.
Environmental precautions:	Contain spill, do not allow material to enter sewers or bodies of water. Keep unprotected persons and animals out of the area.
Methods for cleaning up:	Soak up with sand, sawdust or other absorbent material, shovel or sweep up and bury in an approved landfill.

7. HANDLING AND STORAGE

Handling:	Keep away from sparks, heat and flames. Keep out of reach of children or animals.
Storage:	Store in original container, tightly closed in a locked, dry, well ventilated place away from food or feedstuffs.
Packaging materials:	HDPE Plastic containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace Exposure Guidelines

Exposure Standards: None Established.

Engineering measures

Exposure control measures:	Ventilate enclosed spaces to ensure exposure levels are limited.
<u>Personal Protective Equipment</u>	
Detail specifications for equipment:	Do not eat, drink or smoke when using. Wash hands and face before meals and after work.
Respiratory system:	Do not inhale spray.
Skin and body:	Avoid contact with skin. Wear long sleeved shirt and long pants.
Hands:	Wear waterproof gloves. May cause sensitisation from prolonged skin contact.
Eyes:	Avoid contact with eyes. Wear safety goggles or face shield.
General hygiene:	Wash hands and face before meals and after work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Colour, Odour.	Clear brown liquid with aromatic odour.
pH:	4.8 approx
Vapour Pressure:	0.3 kPa (at 38°C) (hydrocarbon solvent)
Boiling Point:	179 °C – 213 °C (boiling point range of solvent)
Vapour Density:	
Freezing/melting point:	NA
Solubility:	Emulsifies in water.
Specific Gravity/Density:	1.074 @20°C
Flashpoint	75°C
Flammability:	Flammable liquid. Auto-ignition temperature >400°C. Vapours form explosive mixtures in air.
Lower and upper flammability limits:	Upper 7%, Lower 0.6%.
Octanol/water partition coefficient:	Not Available
Explosive Properties:	Not Explosive
Oxidation Properties:	Not an Oxidiser

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to avoid:	Excessive heat and sources of ignition.
Incompatible materials:	Oxidising agents and strong acids.
Hazardous Decomposition Products:	Gases containing nitrogen, nitrous oxide when involved in fire.
Hazardous polymerization:	Does not occur.
Hazardous reactions:	

11. TOXICOLOGICAL INFORMATION

<u>Toxicity Data:</u>	
Acute oral:	LD ₅₀ = 602 mg/kg (Rat)
Acute dermal:	LD ₅₀ > 2000mg/kg (Rat)
Inhalation:	LD ₅₀ > 3mg/litre air (Rat) (Technical ioxynil)
Ingestion:	
Skin:	May cause irritation to the skin.
Eye irritation:	May cause irritation to the eyes.
Sensitization:	May cause sensitisation from prolonged skin contact.
Chronic Effects:	
<u>Chronic toxicity</u>	
	ioxynil octanoate was not carcinogenic and not mutagenic in animal studies. Ioxynil octanoate is classified as a category 3 teratogen: -

Mutagenicity:
Reproduction toxicity:
Carcinogenic:
Other information:

substances which cause concern for man owing to possible teratogenic effects but in respect of which the information is not adequate for making a satisfactory assessment.

Not mutagenic.

Not carcinogenic.

Exposure to high oral doses frequently may cause Target Organ damage.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

ECOTOXIC [Data relates to active ingredient]

Soil: Half-life in soil is approximately 7 days, not mobile in soil-contamination of ground water is unlikely.

Koc = 639 ml/g. Degraded by hydrolysis and by soil micro-organisms.

Aquatic: Very toxic to aquatic organisms.

LC50 = 0.061 mg/litre, 96hrs (Bluegill sunfish) and 0.041mg/litre,96 hours (Rainbow trout).

LC 50 = 0.046mg/litre, 48hrs (Daphnia magna) 9.3C DO NOT apply to bodies of water.

DO NOT contaminate sewers, drains, dams, creeks or any other waterways with product or empty container.

Avian: Low toxicity to birds, LD50 = 1,200 mg/kg (Mallard duck) and 170 mg/kg (Bobwhite quail).

Bees: Non-toxic to bees LC50 > 100 µg/bee.

Harmful to terrestrial vertebrates.

13. DISPOSAL CONSIDERATIONS

Methods of disposal:



Dispose of this product only by using in accordance with label directions. Triple rinse container and add rinsate to spray tank. Recycle empty container through the Agrecovery Programme. If this is not possible, bury in landfill.

Do not contaminate any waterway with chemical or empty container.

14. TRANSPORT INFORMATION - International transport regulations

Hazchem: 3XE
UN number: 3082
Class or Division: 9

Packing Group: III
Marine Pollutant: Yes
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, NOS (loxynil), CLASS 9.

**INTERNATIONAL AIR
TRANSPORT ASSOCIATION
(IATA):**

15. REGULATORY INFORMATION

ACVM Registered Number: P001643
HSNO Approval Code: HSR000525

16. OTHER INFORMATION

Additional information:

Original Issue Date: 20th April 2017

Revision Date: 20 May 2022

Replaces: ES447

Disclaimer EXCLUSION OF LIABILITY: PLEASE READ

This Safety Data Sheet is based on the most recent information available. To the extent permitted by law, users of this information accept that neither the manufacturer, UPL New Zealand Limited as distributor, nor any other distributor have any liability or responsibility whatsoever for any loss, damage or injury whether in contract or tort, whether direct, indirect or consequential howsoever arising in connection with the supply of these information.