Product Name: *Turf Clean Ultra* Print/View Date: 17/07/2020 Page 1 of 13

1. PRODUCT AND COMPANY INFORMATION		
Product Name:	Turf Clean Ultra	
Recommended uses:	Herbicide – selective, post-emergent	
Restrictions on Use/Supply	The dilution rate of this of this mixture is 10 mL in minimum 1L of water when used on turf, and 20 mL in minimum 1 L of water when used on tough or woody weeds.	
Molecular Formula:	Mixture	
Supplier:	Kiwicare Corporation Limited	
Street Address:	225 Maces Road, Bromley, Christchurch, 8062 New Zealand	
Postal Address:	P.O Box 15050, Aranui, Christchurch, 8643 New Zealand	
Telephone	+64 3 389 0778	
Email:	info@kiwicare.co.nz	
Website:	www.kiwicare.co.nz	
Emergency Contact Numbers:	0800 764 766 (0800 POISON)	

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National Poisons Centre:

0800 764 766 (0800 POISON)

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SAFETY DATA SHEET

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2. HAZARDS IDENTIFICATION

HSNO	Transport of	GHS	Signal	Hazard	Precautional	ry statement co	des	
Hazard Classification	Dangerous Goods Pictogram	Pictogram	word	statement code	Prevention	Response	Storage	Disposal
6.1D (oral)	Not applicable for the UN RTDG Model Regulations	\diamondsuit	Warning	H302	P102 P103 P264 P270	P101 P301 + 312 P330	No storage statements	P501
6.1E (aspiration)	Not applicable for the UN RTDG Model Regulations		Warning	H305	P102 P103	P101 P301 + 310 P331	P405	P501
6.3A	Not applicable for the UN RTDG Model Regulations	\diamondsuit	Warning	H315	P103 P264 P280	P302 + 352 P332 + 313 P362	No storage statements	P501
6.4A (mild irritant)	Not applicable for the UN RTDG Model Regulations	No pictogram	Warning	H320	P103 P264	P305 + 351 + 338 P337 + 313	No storage statements	P501
6.9A (oral)	Not applicable for the UN RTDG Model Regulations		Danger	H372	P103 P260 P264 P270	P314	No storage statements	P501
6.9B (inhalation)	Not applicable for the UN RTDG Model Regulations		Warning	H373	P103 P260	P314	No storage statements	P501
9.1A	¥2	×	Warning	H410	P103 P273	P391	No storage statements	P501
9.2A	Not applicable for the UN RTDG Model Regulations		Warning	H421	P103 P273	P391	No storage statements	P501
9.3C	Not applicable for the UN RTDG Model Regulations	No pictogram	No signal word	H433	P103 P273	No response statement	No storage statements	P501

Signal word:

DANGER

Dangerous Goods:

Dangerous Goods (Class 9)

Packaging Group:

|||

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Hazardous Substance (HSNO) Codes:

Pictograms:

Hazard Statement:

Precautionary Statements:

6.9B (inhalation); 9.1A; 9.2A; 9.3C

6.1D (oral); 6.1E (aspiration); 6.3A; 6.9A (oral);

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H302: Harmful if swallowed. H305: May be harmful if swallowed and enters airways. H315: Causes skin irritation. H320: Causes eye irritation. H372: Causes damage to organs through prolonged or repeated ingestion H373: May cause damage to organs through prolonged or repeated inhalation H410: Very toxic to aquatic life with long lasting effects H421: Very toxic to the soil environment. H433: Harmful to terrestrial vertebrates. P102: Keep out of reach of children P103: Read label before use. P260: Do not breathe mist or spray. P264: Wash hands and exposed skin thoroughly after use P270: Do not eat, drink or smoke when using this product. P273: Avoid release to the environment. P280: Wear protective gloves and eye protection P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

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> P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

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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.

P314: Get medical advice/attention if you feel unwell

P330: Rinse mouth.

P331: Do NOT induce vomiting.

P332 + P313: If skin irritation occurs: Get medical advice/ attention

P337 + P313: If eye irritation persists: Get medical advice/attention.

P362: Take off contaminated clothing and wash before re-use.

P391: Collect spillage

3. COMPOSITION/INFORMATION ON INGREDIENTS

Appearance:

Opaque, milky liquid

Ingredients

Ingredients	CAS #	Content %
2,4-D ethyl hexyl ester	1928-43-4	15.0 %
Fluroxypyr-1-methylheptyl ester	81406-37-3	4.0 %
Triclopyr-2-butoxyethylester	64700-56-7	3.0 %
Carfentrazone - ethyl	128639-02-1	0.25%
Diethylene glycol monobutyl ether	112-34-5	30-40%
Other ingredients	NA (Mixture)	To 100 %

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4. FIRST AID MEASURES	
General information:	Keep out of reach of children. Read label before use. Do not eat, drink or smoke when using this product.
	In case of accident, or if you feel unwell, seek medical advice (show the label where possible).
Ingestion:	Rinse mouth. Do NOT induce vomiting. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Have product label at hand.
Eye Contact:	May cause eye irritancy, redness, or watering. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, seek medical advice or call NZ Poisons Centre on 0800 764 766. If medical advice is needed have product label at hand.
Skin Contact:	May cause skin irritation, redness, rash, or swelling. IF ON SKIN: Wash with plenty of soap and water. If you feel unwell seek immediate medical advice.
Inhalation:	Do not breathe mist or spray. If breathing problems develop, seek medical advice or call NZ Poisons Centre on 0800 764 766. If medical advice is needed have product label at hand.
Advice for Medical Doctors:	This product is not an inhibitor of cholinesterase. Antidote: please treat with atropine. Use of oximes is not indicated.

5. FIRE FIGHTING MEASURES

HAZCHEM code:	3Y
Specific Hazards:	None. Minimise the use of water to prevent environmental contamination.

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Suitable Extinguishing Media:	Appropriate fire extinguishers are Powder or Alcohol resistant foam. Use extinguishing media appropriate to the surrounding conditions.
Fire Fighting Advice:	Fire fighters should wear full protective gear, including self-contained breathing apparatus (AS/NZS 1715/1716). Bund area with sand or earth to prevent contamination of drains or waterways. Dispose of fire control water or other extinguishing agent and spillage safely later.
Hazardous Products of Combustion:	Carbon monoxide (CO), hydrogen chloride gas, hydrogen fluoride, nitrogen oxides (NO _x), carbon oxides, and ammonia (NH ₃)

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6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:	Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.
	For personal protection see section 8.
Environmental precautions:	Prevent leakage or spillage if safe to do so.
Minor Spills (Up to 20 kg):	Low environmental hazard. Contain spill and collect.
Major Spills (more than 20 kg):	Minimise spread. Contain spill and collect. Do not allow product or washings to enter the waterways or sewer. If spill does enter waterway contact local authority.
	Collect in an appropriate sealable container for disposal in an approved landfill or incinerate at an authorised installation.

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7. HANDLING AND STORAGE When handling product use personal protective Precautions for safe handling: equipment, specifically gloves and eye protection. Always use good personal hygiene procedures when handling this product. Wash hands and face before eating, drinking or smoking. Clean equipment after use. Do not contaminate drains, sewers or waterways. All people and pets must be kept away from the area while it is being sprayed. Do not allow anyone, especially children and toddlers, onto the sprayed area until the spray has dried. Conditions for safe storage including Keep out of the reach of children. Store in original container in a cool, dry, ventilated incompatibilities: place, away from direct heat of sunlight. Store away from foodstuffs, children and animals. Product is best stored in a locked container/cabinet Minimum shelf life: 2 years. Protection against fire and explosion: Keep away from heat sources although the product has no flammability. The product is not

explosive. Keep away from oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Standards:	No relevant New Zealand or International occupational exposure limits
Engineering Controls:	No special requirements when used as recommended.
Hand protection:	Wearing chemical resistant gloves is recommended.
Eye protection:	Wearing personal eye protection is recommended.
Body protection:	Skin protection not ordinarily required beyond standard issue work clothes.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection:	No special requirement when used as recommended.
Environmental Exposure Controls:	Minimise release to the environment. For bulk storage, an environmental assessment must be made to ensure compliance with local environmental legislation.

Additional NZ EPA controls:

Additional Controls

Code	Section of HSNO Act	Control
Label	Section 77 variation to Labelling Notice	 The substance label must include the following statement, or words to the same effect: this substance must not be applied in agriculture or in a wide dispersive manner; the dilution rate of this substance is 10 mL in minimum 1 L of water when used on turf, and 20 mL in minimum 1 L of water when used on tough or woody weeds; it is recommended that gloves are worn when using this substance; it is recommended that protective eyewear is worn when using this substance; all people and pets must be kept away from the area while it is being sprayed. Do not allow anyone, especially children and toddlers, onto the sprayed area until the spray has dried; this substance may damage desirable plants, take steps to prevent application to non-target plants.
Application Method	77A	The substance must not be applied in agriculture or in a wide dispersive manner.
Maximum Impurity	77A	 The following limits are set for toxicologically relevant impurities in the active ingredient 2,4-D ethyl hexyl ester used to manufacture this substance: Free phenol (calculated as 2,4-dichclorophenol): 3 g/kg maximum The maximum content of dioxin toxicity equivalent (TEQ) must be less than 0.1 ppb (ng/g) The concentration of the 2,3,7,8 tetrachlorodibenzo-para-dioxin (2,3,7,8 TCDD) congener must be undetectable at a detection limit of a least 0.01 ppb (ng/g)
Packaging Size	77A	The packaging of this substance is restricted to a packing size of 1 L or less.
Use Restriction	77A	The dilution rate of this substance is 10 mL in minimum 1 L of water when used on turf, and 20 mL in minimum 1 L of water when used on tough or woody weeds.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Milky, white, opaque liquid
Odour:	Mild odour
Odour Threshold:	No data
pH Value:	Not applicable
Melting/freezing point:	No data
Boiling point (range):	No data
Flash Point:	101°C
Flammability:	Not applicable
Explosive limits:	No data
Vapour pressure:	No data
Vapour density:	No data
Relative density:	920-980 g/l
Solubility:	Emulsifiable
Partition coefficient:	No data
Auto-ignition temperature:	No data
Decomposition temperature:	No data
Viscosity:	No data

10. STABILITY AND REACTIVITY

Stability & Chemical reactivity:	Stable under normal conditions of use. Not explosive or oxidising.
Incompatibility or conditions to be avoid:	Avoid excessive heat or strongly oxidising substances
Corrosive Properties:	Not corrosive to eyes or skin.

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10. STABILITY AND REACTIVITY	
Thermal Decomposition:	Hazardous products of combustion; see section 5 for details.
11. TOXICOLOGICAL INFORMATIO	Ν
The relevant hazard classes on the mixture:	6.1D (oral), 6.1E (aspiration hazard), 6.3A, 6.4A, 6.5B, 6.9A (oral), 6.9B (inhalation), 9.1A, 9.2A, 9.3C
Acute Toxicity:	Acute oral $LD_{50} = 737 \text{ mg/kg}$ (rat).
	Acute dermal LD_{50} >2000 mg/kg (rat)
Aspiration hazard	May cause irritation on inhalation of mist, gas, or vapour
Skin corrosion/irritation:	Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product
Serious eye damage/eye irritation:	May cause eye irritation
Respiratory or skin sensitisation:	May cause skin sensitisation and/or contact dermatitis
Germ cell mutagenicity:	No data available
Carcinogenicity:	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity:	This product is not expected to cause reproductive or developmental effects.
Specific organ toxicity – single exposure:	No data available
Specific organ toxicity – repeated exposure:	No data available
Narcotic effects:	No data available.

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To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

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12. ECOTOXICITY INFORMATION	
Ecotoxicity:	9.1A: 1.2 mg/L 96-hours LC_{50} Pink salmon.
	Very toxic to terrestrial invertebrates.
Bioaccumulation potential:	Not likely to be Bioaccumulative
Soil Toxicity and degradability:	No soil toxicity. Half-life 5-10 days
Mobility in soil:	Moderate to high mobility potential, but rapidly degraded.
13. DISPOSAL CONSIDERATIONS	
Waste treatment – recommendation:	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies
	Any appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Notice 2017.
Container Disposal:	Empty containers can be recycled or sent to landfill after cleaning if in compliance with local and national regulations.
	DO NOT reuse containers.
14. TRANSPORT INFORMATION	
Road, Rail; Marine and Air:	
UN Number:	3082
Dangerous Goods Class:	Class 9
Hazchem Code:	3Y
Packaging Group:	III
Proper Shipping Name:	Environmentally Hazardous Substance, Liquid, N.O.S (contains 15% 2,4-D ethyl hexyl ester)
Segregation:	Class 1

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15. N.Z. REGULATORY INFORMATION

EPA HSNO Number:

HSR101418

HSNO Classifications:

6.1D (oral), 6.1E (aspiration hazard), 6.3A, 6.4A, 6.5B, 6.9A (oral), 6.9B (inhalation), 9.1A, 9.2A, 9.3C

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HSNO Controls:

Refer to HSR101418

16. OTHER INFORMATION

SDS date of preparation:

SDS date of revision:

Emergency Contact:

Work Hours:

Kiwicare Corporation 225 Maces Road PO Box 15050 Christchurch Tel: (03) 389 0778 Fax: (03) 389 0669 24 Hours:

16 / 06 / 2020

16 / 06 / 2025

National Poisons Centre PO Box 913 Dunedin Tel: 0800 764 766 (POISON)

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Further Information:

All Safety Data Sheets are subject to review and should not be left longer than five years before and update is obtained.

For further information visit the Kiwicare web site, www.kiwicare.co.nz, or contact the supplier of the starting material.

The information in this document should be made available to all who may handle the product. For proper and safe use of this product, please refer to the product label.

This information is based on data believed by Kiwicare Corporation Limited to be accurate at the time of writing. It is given in good faith, but no warranty expressed or implied is made as to its accuracy, completeness or otherwise. Every person dealing with the materials referred herein does so at their own risk absolutely and must make independent determinations of suitability and completeness of information from all sources to ensure their proper use.

Attention is drawn to the application and safety instructions set out on the label. This sheet is not a substitute for safety, hazard or application instructions set out on the label. As Kiwicare Corporation Limited and their distributors have no control over storage or use of this product no liability for accident or damage will be accepted.

Abbreviations:

ADR:	European agreement concerning the international carriage of dangerous goods by
Road.	
CLP:	Classification, Labelling and Packaging
IMDG:	International Maritime Dangerous Goods.
IATA:	International Air Transport Association.
ICAO:	International Civil Aviation Organisation
RID:	Regulations concerning the International carriage of Dangerous goods by rail.
GHS:	Global Harmonized System
EU:	European Union
EC:	European Commission
TLV:	Threshold Limit Value
TWA:	Time Weighted Average
STEL:	Short-Term Exposure Limit
H Phrase:	Hazard phrase
P Phrase:	Precautionary phrase

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