

## SAFETY DATA SHEET

# DIABLO®

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND COMPANY

#### 1.1 Identifiers

Product name: **Diablo**  
 Other Name(s): 300g/L clopyralid as the triisopropanolamine salt in the form of a soluble concentrate.

#### 1.2 Recommended use of the chemical and restrictions on use

Product Use: A broad spectrum herbicide for thistles and certain broadleaf weeds for use on a range of crops and pasture, turf and in forest areas.

#### 1.3 Supplier contact details:

Company name: Grosafe Chemicals Limited  
 Address: 20 Jean Batten Drive Mt Maunganui, 3116  
 Telephone: 0800 220 002  
 Email: [info@grosafe.co.nz](mailto:info@grosafe.co.nz)

**Emergency telephone number (24 hour)** 0800 CHEMCALL (0800 243 622)

### SECTION 2: HAZARD IDENTIFICATION

#### 2.1 Classification of the substance

Hazardous substance according to Hazardous Substances and New Organisms (HSNO) Act 1996  
 HSNO Approval: HSR100933

**Hazard Classifications:** Hazardous to the aquatic environment chronic Category 2; Hazardous to soil organisms; Hazardous to terrestrial vertebrates.

#### 2.2 Label elements:

##### Pictograms:



**Signal Word:** No signal word.

##### Hazard statements:

H411 Toxic to aquatic life with long lasting effects.  
 Hazardous to soil organisms.  
 Harmful to terrestrial vertebrates.

##### Precautionary statements:

###### *Prevention*

P102 Keep out of reach of children.

P103	Read label before use.
<i>Response</i>	
P391	Collect spillage.
<i>Storage</i>	-
<i>Disposal</i>	
P501	Dispose of contents/container in accordance with local regulations.

### Additional labelling statements required under Hazardous Substances (Labelling) Notice 2017

Do not apply directly into or onto water.

Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area.

Ecotoxic herbicide. Not for use in home gardens.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS	Proportion %w/w
Clopyralid	1702-17-6	20-30%
Other ingredients that do not contribute to the hazard classifications of this product	-	Balance

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General Information:

For advice, call NATIONAL POISONS CENTRE (0800 POISON) for advice. Have produce container or label at hand.

**IF SWALLOWED:** Call a POISON CENTRE or doctor if you feel unwell.

**IF ON SKIN:** Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation develops, get medical advice.

**IF INHALED:** Remove person to fresh air and keep at rest in a position comfortable for breathing. If symptoms develop seek medical attention.

#### Medical attention and special treatment

Treat symptomatically. No symptoms relating to exposure are expected.

## SECTION 5: FIRE FIGHTING MEASURES

### 5.1 Suitable extinguishing media

Carbon dioxide, dry chemical, foam. Soft stream water fog or fine water spray if no alternatives. Unsuitable: High pressure water jet.

### 5.2 Hazards from Combustion Products

There is no risk of an explosion from this product under normal circumstances if involved in a fire. Product is unlikely to decompose until heated to dryness. On further heating will emit unidentified toxic fumes.

### 5.3 Specific hazards arising from this chemical

Not flammable. Choose extinguishing media to suit the burning material. If waterfog or fine water spray is used ensure all runoff is contained.

#### 5.4 Precautions in connection with fire

Isolate fire area. Evacuate downwind. Firefighters to wear self-contained breathing apparatus and suitable protective clothing if risk to of exposure to vapour or smoke. Keep containers cool by spraying with water. Do not breathe or contact smoke, gases or vapours generated. Contain all runoff.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Have this SDS available. In the event of an accidental spill, wear full protective clothing including respiratory, gloves and eye/face protection. Wash contaminated personal protective equipment and clothing, and dry before re-use.

### 6.2 Environmental precautions

Prevent spillage from entering drains or waterways. If contamination of drains, streams, watercourses, etc. is unavoidable, advise the local water authority.

### 6.3 Methods and materials for containment and cleaning up

Contain spilled material. For small liquid spills, use absorbent material such as sand, soil, vermiculite and recover into labelled drums that can be sealed for safe disposal. For large liquid spills, recover liquid into labelled containers then absorb remaining liquid and transfer to drums for disposal. Clean area with water and detergent. Dispose of contaminated materials to approved landfill in accordance with local regulations.

## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Read the product label before use. Wear protective eye protection/face protection, protective gloves and protective clothing. Wash hands and any exposed skin thoroughly after handling. Do not apply directly into or onto water. Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area.

### 7.2 Conditions for safe storage

Store in the tightly closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight. DO NOT store near feedstuffs, fertilisers or seed.

## SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

### 8.1 Occupational exposure limit values

No exposure limit established

### 8.2 Biological limit values

No exposure limits allocated.

### 8.3 Engineering controls

Use in ventilated areas only. Use local exhaust at all process locations. Ventilate all transport vehicles prior to unloading. Keep containers closed when not in use. Refer to relevant regulations for further information concerning ventilation requirements.

### 8.4 Personal protective equipment (PPE)

The following Standards provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: **AS/NZS 4501**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

**Eye/Face Protection:** Wear protective glasses, goggles or face shield when mixing or applying product.

**Skin Protection:** Wear impervious gloves, coat, trousers, waterproof hat. Ensure all skin areas are covered.

**Respirator:** Where product is being sprayed and a mist could be produced, a respirator should be worn. It should be fitted with a cartridge suitable for agricultural chemicals.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Blue liquid
Odour	No odour
Odour threshold	Not available
pH	6.0 – 8.0 (undiluted)
Melting/Freezing Point	<0°C (approximate)
Boiling Point /Range	100-105°C
Flash point	Not applicable. Not flammable
Flammability (solid, gas)	Non-combustible material
Upper/lower flammability or explosive limits	No data
Vapour Pressure	1.33 mPa at 24°C for clopyralid acid
Vapour density	No data
Specific gravity	1.16 g/L
Solubility	Soluble in water
Partition Co-efficient n-octanol/water	No data
Auto-ignition temperature	No data
Decomposition temperature	No data
Viscosity	No data
Particle characteristics	No data

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity and stability

Stable under normal conditions of storage and handling.

### 10.2 Conditions to Avoid

Do not store for prolonged periods in direct sunlight.

### 10.3 Incompatible materials

Explosives (class 1), oxidising gases, oxidising liquids, oxidising solids, organic peroxides

### 10.4 Hazardous decomposition products

Product is unlikely to decompose until heated to dryness. On further heating will emit unidentified toxic fumes.

### 10.5 Possibility of hazardous reactions

No special considerations. Not known to polymerise.

### 10.6 Hazardous Polymerisation

No information available.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Health hazard information

The product is classified for health hazards according to an assessment of information on product components.

### 11.2 Toxicological information

#### Acute toxicity:

Not classified.

<b>Aspiration hazard:</b>	Not classified.
<b>Respiratory irritation:</b>	Not classified.
<b>Skin corrosion/irritation</b>	Not classified.
<b>Serious eye damage/irritation</b>	Not classified.
<b>Respiratory or skin sensitisation</b>	Not classified
<b>Germ cell mutagenicity:</b>	No ingredients in product identified as presumed or suspected mutagens.
<b>Carcinogenicity</b>	No ingredients in product identified as presumed or suspected carcinogens.
<b>Reproductive toxicity</b>	No ingredients in product identified suspected of damaging fertility or the unborn child.
<b>Specific target organ toxicity – single/repeated exposure</b>	Not classified.
<b>Narcotic effects</b>	Product contains no ingredient identified as causing narcotic effects.

### 11.3 Toxicological data

No data for formulated product. The following data is for the active ingredient, clopyralid.

Acute oral LD50:	>5000mg/kg in the rat
Acute dermal LD50:	> 2000mg/kg in the rat
Acute inhalation LC50:	>0.38 mg/l in the rat
Dermal irritation	Non-irritating
Eye irritation:	Non-irritating
Skin sensitivity:	Not a sensitiser.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Ecotoxicity

This product is classified as Hazardous to the aquatic environment chronic Category 2;

Hazardous to soil organisms, Hazardous to terrestrial vertebrates.

No data available for formulated product. The following data is for the active ingredient, clopyralid.

**Aquatic life :** LC50 (96 hr) for rainbow trout is 103.5 mg/L. LC50 (96 hr) for bluegill sunfish is 125.4 mg/L and EC50 (48hr) is 225 mg/L. EC50 Daphnia magna Chronic 21 day NOEC 17 mg/L. Algae LC50 6.9 mg/L. Aquatic plants acute 7 day EC<sub>50</sub>, biomass 89 mg/L.

**Birds:** slightly toxic to birds on an acute basis LD50 is 1465 mg/kg, but practically non-toxic on a dietary basis LC50 > 5000 mg/kg.

**Bees:** Not toxic to bees LD50 >100 µg/bee.

**Soil organisms:** Earthworms: Acute 14 day LC<sub>50</sub> >1000 mg kg<sup>-1</sup>, chronic NOEC, reproduction >=1.97 mg/kg. Collembola: Chronic NOEC >50 mg/kg.

### 12.2 Persistence and degradability

Not available for formulated product. Clopyralid classified as not readily biodegradable.

### 12.3 Mobility

No data available for formulated product. Clopyralid: EU 2017 dossier lab studies DT<sub>50</sub> range 4.9-64.6 days, DT<sub>90</sub> range 16.2-214.6 days, Soils=10; field studies DT<sub>50</sub> range 2.0-13.5 days, DT<sub>90</sub> range 12.1-78.7 days; Other sources: DT<sub>50</sub> 40 days (R3).

### 12.4 Bioaccumulative Potential

No data available for formulated product. Clopyralid is non-bioaccumulative. Log Kow of -2.63 at pH 7

### 12.5 Other adverse effects

This product may cause serious damage to non-target terrestrial plants.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Product Disposal

Dispose of this product only by using according to the label, or through a Chemical Recovery service or other licensed hazardous waste disposal facility.

### 13.2 Container Disposal

Triple rinse empty container and add rinsate to spray tank. Submit clean empty container to an Agrecovery® depot for recycling. Alternatively, puncture and dispose of at an approved landfill.

### 13.3 Precautions

Do not allow product or empty container to enter waterways.

### 13.4 Disposal methods to avoid

Do not burn empty container. Do not allow product or empty container to enter waterways.

## SECTION 14: TRANSPORT INFORMATION

### Road and Rail Transport:

Classified as Dangerous Goods for the transport according to the New Zealand Standard NZS 5433:2012 Transport of Dangerous Goods on Land.

### Marine Transport (IMO/IMDG):

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

### Air Transport (ICAO/IATA):

Classified as Dangerous Good by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulation for transport by air.

<b>UN Number:</b>	3082
<b>UN Proper Shipping Name:</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Clopyralid)
<b>Transport hazard class(es)</b>	9
<b>Packing Group:</b>	III
<b>HAZCHEM:</b>	3Z
<b>Special Precautions for User:</b>	Not available
<b>IMDG Marine pollutant:</b>	Yes
<b>Transport in Bulk:</b>	Not available

## SECTION 15: REGULATORY INFORMATION

Hazardous substance HSR100933.  
according to Hazardous  
Substances (Hazard  
Classification) Notice  
2020.

### Approval number:

**Hazardous classifications:** Hazardous to the aquatic environment chronic Category 2; Hazardous to soil organisms; Hazardous to terrestrial vertebrates.

### Additional controls:

Ecotoxic herbicide. Do not use for treating turf that will be mown and the clippings used for making compost; or made available for collection for, or deposited at, a municipal green waste

recycling depot. Clippings from turf treated with Diablo must not be composted or recycled

<b>HSW (HS) Regulations 2017</b>	<b>Trigger Quantity</b>
<b>Certified Handler</b>	Not required
<b>Location Certificate</b>	Not required
<b>Signage Trigger Quantity (Schedule 3)</b>	1000 L
<b>Emergency Response Plan (Schedule 5)</b>	1000 L
<b>Secondary Containment (Schedule 16)</b>	1000 L
<b>Tracking (Schedule 26)</b>	Not required
<b>Tolerable Exposure Level (TEL)</b>	None set
<b>Environmental Exposure Level (EEL)</b>	None set
<b>International Agreements</b>	Not applicable
<b>Additional information:</b>	Refer to HS Notices ( <a href="http://www.epa.govt.nz">www.epa.govt.nz</a> ) and HSW HS Regulations ( <a href="http://www.worksafe.govt.nz">www.worksafe.govt.nz</a> )
<b>ACVM registration:</b>	Registered pursuant to the Agricultural Compounds and Veterinary Medicines Act 1997; registration number P010166.

## SECTION 16: OTHER INFORMATION

### 16.1 Date of preparation or last revision of SDS

<b>SDS issued</b>	05 Nov 2024
<b>SDS supersedes</b>	24 July 2024
<b>Reason issued</b>	Correction to DG

### 16.2 ABBREVIATIONS

<b>ADI</b>	Acceptable Daily Intakes
<b>CAS number</b>	Chemical Abstracts Service Registry Number
<b>CCID</b>	Chemical Classification Identification Database
<b>EPA</b>	Environmental Protection Authority
<b>ErC<sub>50</sub></b>	Half maximal Effective Concentration
<b>GHS</b>	Globally Harmonized System of Classification and Labelling of Chemicals
<b>Hazchem Code</b>	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
<b>HSNO</b>	Hazardous Substances and New Organisms
<b>HS</b>	Health and Safety
<b>HSR</b>	Hazardous Substances Register
<b>IARC</b>	International Agency for Research on Cancer
<b>LC<sub>50</sub></b>	Median Lethal Concentration
<b>LD<sub>50</sub></b>	Median Lethal Dose
<b>SDS</b>	Safety Data Sheets
<b>NOAEL</b>	No Observable Adverse Effect Level
<b>NOEL</b>	No Observable Effect Level
<b>NOS</b>	Not otherwise specified

<b>STEL</b>	Short Term Exposure Limit
<b>SWA</b>	Safety Work Australia
<b>TWA</b>	Time-Weighted Average
<b>UN Number</b>	United Nations Number

### **16.3 REFERENCES**

Manufacturer information  
EPA CCID and Approved Substance databases  
University of Hertfordshire Pesticides Properties Database

### **16.4 OTHER**

Diablo® is a registered trademark of Grosafe Chemicals Ltd

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End of Safety Data Sheet