

SAFETY DATA SHEET

According to
HSNO Hazardous Substances (Safety Data Sheets) Notice 2017

Section 1. Identification of the material and the supplier

Product Name: Extracta Herbicides 2,4-D 720
 Substance: Soluble concentrate of 2,4-D
 Chemical name of active ing: IUPAC Name: dimethylammonium (2,4-dichlorophenoxy)acetate
 Product Use: Agricultural herbicide
 Restriction of Use: Refer to Section 15

New Zealand Supplier: **Wholesale Seeds Limited**
 Address: 5 Bryant Street, Ashburton, New Zealand

Telephone No: 03 307 9260

Emergency No: **0800 CHEMCALL (0800243 622)**

Manufacturer: **Danken New Zealand Ltd**
 Address: P.O. Box 16194
 Hornby
 Christchurch, 8441

Telephone: 0800 326 536

Date of SDS Preparation: 21 May 2024

Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval No: HSR007878

Pictograms



Signal Word: **DANGER**

GHS Classification and Category	Hazard Code	Hazard Statement
Acute oral toxicity Cat. 4	H302	Harmful if swallowed.
Specific target organ toxicity – repeated exposure Cat. 1	H372	Causes damage to organs through prolonged or repeated exposure.
Serious eye damage Cat. 1	H318	Causes serious eye damage.
Hazardous to the aquatic environment acute Cat. 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment chronic Cat. 1	H410	Very toxic to aquatic life with long lasting effects.
Hazardous to soil organisms	H421	Hazardous to soil organisms

Hazardous to terrestrial vertebrates	H432	Hazardous to terrestrial vertebrates
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Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P260	Do not breathe dust, fumes, gas, mist, vapours or spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective clothing as detailed in Section 8.

Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P310	Immediately call a POISON CENTER or doctor/physician.
P330	Rinse mouth.
P391	Collect spillage.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage Code	Storage Statement
None allocated	Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs, seeds, and fertilisers. Storage must be in accordance with NZS8409 Management of Agrichemicals.

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Wt%	CAS NUMBER.
2,4-D dimethylamine	70 -75	2008-39-1
Non hazardous	To balance	

Section 4. First Aid Measures

Routes of Exposure:

- If in Eyes Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
- If on Skin Remove all contaminated clothing and wash before reuse. Wash off skin immediately with soap and plenty of water for 15 to 20 minutes. If skin irritation occurs: Get medical advice/attention.
- If Swallowed Rinse mouth. Do not perform gastric lavage if victim is unconscious Get medical attention immediately.
- If Inhaled Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Apply artificial respiration if not breathing. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

- Symptoms: Refer to Section 11 for full details.
- Swallowed: Harmful if swallowed.

Inhaled:	Not applicable.
Eye:	Causes serious eye damage.
Skin:	Not applicable.
Chronic:	Causes damage to organs through prolonged or repeated exposure.

Notes to Doctor: Poisoning symptoms in laboratory animals were non-specific. There is no specific antidote available. Treat symptomatically. Removal by gastric lavage and catharsis should be considered. If vomiting is induced, suggest endotracheal and/or oesophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Maintain blood pressure and airway. Give oxygen if respiration is depressed.

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable
Hazards from products	Hazardous decomposition products formed under fire conditions. - Nitrogen oxides, hydrogen halides.
Suitable Extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Precautions for firefighters and special protective clothing	Wear protective clothing and self-contained breathing apparatus. Do not allow run-off from firefighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.
HAZCHEM CODE	3Z

Section 6. Accidental Release Measures

Wear personal protective equipment detailed in Section 8. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing vapours, mist or gas.

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Absorb with absorbent material. Put into a suitable, closed containers for disposal. Dispose of in compliance with local and/or national regulations or as per Section 13.

Section 7. Handling and Storage

Precautions for Handling:

- Read carefully and follow all instructions.
- Do not breathe dust, fumes, gas, mist, vapours or spray.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Avoid release to the environment.
- Wear protective clothing as detailed in Section 8.
- Avoid contact with eyes and skin and inhalation of particles.
- Do not eat, drink or smoke when handling;

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Keep out of reach of children.
- Store in the closed, original container in a cool, well ventilated area.
- DO NOT store for prolonged periods in direct sunlight.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance		TWA		STEL	
		ppm	mg/m ³	ppm	mg/m ³
2,4-D	[94-75-7]	-	10	-	-

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2023 14TH EDITION.

Acceptable Daily Intake (ADI):

JMPR: 0.01 mg/kg b.w. [2001, 1997]; 0.01 mg/kg b.w. [1996] (sum of 2,4-D and its salts and esters, as 2,4-D); EC: 0.05 mg/kg b.w. [2001]; EPA: aRfD 0.025, cRfD 0.005 mg/kg b.w. [2005].

No-observable-effect-level (NOEL):

Rats and mice 2-year, 5mg/kg b.w.; Dogs ,1-year, 1 mg/kg b.w.

Engineering Controls

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Wash hands before breaks and at the end of workday.

Personal Protection Equipment



Eyes	Protective glasses or goggles should be worn when this product is being used. Failure to protect your eyes may cause them harm. Emergency eye wash facilities are also recommended in an area close to where this product is being used.
Hands	The information at hand indicates that this product is not harmful and that normally no special skin protection is necessary. However, we suggest that you routinely avoid contact with all chemical products and that you wear suitable gloves (preferably elbow-length) when handling this product.
Skin	Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory	Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
General	Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Section 9 Physical and Chemical Properties

Appearance	Liquid
Colour	Light yellow
Odour	Not available
Odour Threshold	Not available
pH	Not available
Boiling Point	Not available
Melting Point	Not available

Freezing Point	Not available
Flash Point	Not available
Flammability	Not flammable
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not applicable for the end-use product, Refer to the active substance, 1.86×10^{-2} mPa (25°C, 2,4-D)
Vapour Density	Not available
Relative Density	Not available
Water Solubility	Miscible with water
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Particle Characteristics	Not applicable for the end-use product, Refer to the active substance, K_{ow} logP = 2.58–2.83 (pH 1), 0.04–0.33 (pH 5); – 0.75 (pH 7) (EPA RED, 2,4-D)

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Possibility of hazardous reactions	Not available
Conditions to Avoid	Moisture, basic agent, high temperature, direct sunlight.
Incompatible Materials	Strong oxidizing agents.
Hazardous Decomposition Products	Hazardous decomposition products formed under fire conditions. - Nitrogen oxides, hydrogen halides.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Harmful if swallowed. Rats: LD50 >949 mg/kg*
Dermal	Not triggered as hazardous. Rats: Acute percutaneous LD50 >2000 mg/kg.*
Inhalation	Not triggered as hazardous. Rats: LC50 (4 h) > 3.5 mg/L air*
Eye	Causes serious eye damage.
Skin	Not triggered as hazardous.

Chronic Effects:

Carcinogenicity	Not triggered as hazardous.
Reproductive Toxicity	Not triggered as hazardous.
Teratogenic Effects	Not triggered as hazardous.
Germ Cell Mutagenicity	Not triggered as hazardous.
Aspiration	Not triggered as hazardous.
STOT/SE	Not triggered as hazardous.
STOT/RE	Causes damage to organs through prolonged or repeated exposure.

* There is no data available for the formulation type, so the technical information for the a.i. is listed for reference.

Mutagenic effects:

Genotoxicity in vitro - Ames test - *S. typhimurium*-with and without metabolic activation – negative.

Genotoxicity in vivo-mouse-male and female-Oral- negative.

Carcinogenic effects:

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.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Teratogenic effects:

Developmental Toxicity-rat-Oral

Specific Developmental Abnormalities: Musculoskeletal system

Section 12. Ecotoxicological Information

Very toxic to aquatic life with long lasting effects.

Hazardous to soil organisms.

Hazardous to terrestrial vertebrates.

Product:	
Persistence and degradability	No data available.
Bioaccumulation	No data available.
Mobility in Soil	No data available.

Eco Toxicity (ePM):

Route	Species	Duration	Value LC50/EC50
Fish	Rainbow trout	96 hr	100 mg/L
Algae	Selenastrum capricornutum:	-	51.2 mg/L
	Navicula pelliculosa:		4.67 mg/L
Bees		-	>100 µg/bee.(contact) >94 µg/bee.(oral)
Other aquatic spp	Lemna gibba		EC50: 0.58mg/L NOEC: 0.27 mg/L
Bird	Bobwhite quail	5 days	Acute oral LD50 500mg/kg
	Mallard ducks		Acute oral LD ₅₀ >5620mg/L

Do not allow to enter waterways and drains.

Section 13. Disposal Considerations**Disposal Method:**

Triple or preferably pressure rinse containers before disposal. Add rinsing to spray tank. DO NOT dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt. Dispose of washings, contaminated materials, used absorbents and other waste materials as directed by local regulations.

Precautions or methods to avoid: Avoid release to the environment.

Section 14 Transport Information

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2020 and SNZ HB 5433:2021



Road, Rail, Sea and Air Transport

UN No	3082
Class - Primary	9
Packing Group	III
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S (Dimethylammonium 2,4-dichlorophenoxyacetate)
Marine Pollutant	Yes
Special Provisions	If the product's individual container is below 5kg, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

Section 15 Regulatory Information

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval Code: HSR007878

HSW (HS) Regulations 2017 and EPA Notices	Trigger Quantity
Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	100L
Emergency Response Plan	100L
Secondary Containment	100L
Restriction of Use:	Use only for intended use.
ACVM Registration No.	P10143

Section 16 Other Information

Glossary

Cat	Category
EC ₅₀	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC ₅₀	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD ₅₀	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2023 14th edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

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Please contact the New Zealand distributor, if further information is required.

Issue Date: 21 May 2024 Review Date: 21 May 2029