

SAFETY DATA SHEET

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

Section 1. Identification of the material and the supplier

Product: **Extracta Herbicides Mesotrione 480**
Substance: Suspension concentrate of Mesotrione
Chemical Name: IUPAC Name: 2-(4-mesyl-2-nitrobenzoyl)cyclohexane-1,3-dione
CA Name: 2-(4-mesyl-2-nitrobenzoyl)cyclohexane-1,3-dione
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: HSR100665

Pictograms



Signal Word: **Warning**

GHS Classification and Category	Hazard Code	Hazard Statement
Eye irritation Cat. 2	H319	Causes serious eye irritation.
Specific target organ toxicity – repeated exposure Cat. 2	H373	May cause damage to organs through prolonged or repeated exposure.
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.

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P260	Do not breathe fumes, gas, mist, vapours or spray.
P264	Wash hands thoroughly after handling.
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.
P314	Get medical advice/attention if you feel unwell.
P391	Collect spillage.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.

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.

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

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Weight %	CAS NUMBER.
Mesotrione	45-50	104206-82-8
Ethylene glycol	5 - <10	107-21-1
Non hazardous	To bal	NA

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. If eye irritation persists: Get medical advice/attention.
If on Skin	Take off contaminated clothing. Rinse skin immediately with soap and plenty of water for 15 to 20 minutes. If irritation develops, get medical attention.
If Swallowed	Remove by gastric lavage and catharsis. Maintain blood pressure and airway. Give oxygen if respiration is depressed. 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: Causes serious eye irritation. 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.

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable
Hazards from products	Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides.
Suitable Extinguishing media	Use foam, carbon dioxide, dry powder, halon extinguishant or water fog or mist, (avoid use of water jet).
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 and mist.

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. Keep in 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 fumes, gas, mist, vapours or spray.
- Avoid release to the environment.
- Avoid contact with eyes.
- Spray solutions of this product should be mixed, stored and applied using only plastic, plastic-lined steel, stainless steel or fiberglass containers. Concentrate should not be stored in mild steel, cast iron or aluminum containers.
- Keep product in original tightly closed container; avoid inhalation of particles, do not get on skin, eyes or clothing; do not eat, drink or smoke when handling.
- Wash hands before eating, drinking or smoking.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Keep out of reach of children.
- Store in original container only in a well-ventilated, cool, dry, secure area.
- Protect from heat, sparks and flame.
- Do not expose sealed containers to temperatures above 40°C and prevent product from freezing.
- Keep separate from other products to prevent cross contamination.
- Rotate stock.
- Clean up spilled material immediately.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³
Ethylene glycol (vapour and mist) [107-21-1]	-	-	-	50
		Ceiling 127		

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 APRIL 2022 13TH EDITION.

Product Name: **Extracta Herbicides Mesotrione 480** SDS Prepared by: Technical Compliance Consultants (NZ) Ltd
Date of SDS: 21 May 2024 Tel: 64 9 475 5240 www.techcomp.co.nz

Acceptable Daily Intake (ADI):

(EC) 0.01mg/kg b.w.; aRfD 0.02mg/kg b.w. [2003]; (EPA) cRfD 0.007mg/kg [2001].

No-observable-effect-level (NOEL):

Rats (90 d) 0.24, mice 61.5mg/kg b.w. daily; Rats (2 y) 7.7mg/kg b.w. daily;

Mice (multi-generation reproduction) 1472, for rats 0.3mg/kg b.w. daily.

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	Respiratory protection is not required.
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
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Appearance	Homogeneous flowable 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, $<5.69 \times 10^{-3}$ mPa (20°C) (mesotrione)
Vapour Density	Not available
Relative Density	Test and report
Water Solubility	Miscible with water.
Partition Coefficient:	Not applicable for the end-use product, Refer to the active substance, $K_{ow} \log P = 0.11$ (unbuffered water); < -1.0 (pH 7 and 9)
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal storage conditions.
Possibility of hazardous reactions	Not available
Conditions to Avoid	Concentrate should not be stored in mild steel, cast iron or aluminum containers. Spray solutions should not be mixed, stored or applied in containers other than plastic, stainless steel, plastic-lined steel or fiberglass.
Incompatible Materials	Strong oxidizing agents.
Hazardous Decomposition Products	Carbon oxides, Nitrogen oxides (NOx), Oxides of Sulphur.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Not triggered as hazardous. ATE Calc: LD50 = >5000 mg/kg
Dermal	Not triggered as hazardous.
Inhalation	Not triggered as hazardous.
Eye	Causes serious eye irritation.
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.

Section 12. Ecotoxicological Information

Very toxic to aquatic life with long lasting effects.
Hazardous to soil organisms.

Product:	
Persistence and degradability	In soil, DT50 (lab., anaerobic) 4 d (first order); DT90 12 d. DT50 (lab., aerobic) 6–27 d (17 soils); DT90 20–89 d. Soil photolysis c. 23 d. DT50 (field) 3–7 d (6 sites); DT90 36–78 d. Degradation is faster at higher pH values. Koc 19–141 (seven soils, pH 5.1–8.2; o.c. 0.53–3.31%); Koc 29–390, Kd 0.2–5.2 (13 soils, pH 4.5–8.2, o.c. 0.53–3.31%); correlated inversely with pH and directly with soil organic carbon.
Bioaccumulation	No data available.
Mobility in Soil	No data available.

Do not allow to enter drains or water courses.

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 (Mesotrione)
Marine Pollutant	YES
Special Provisions	If the product's individual container is below 5L/kg, 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: HSR100665

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 as for intended use.
ACVM Registration Number	P9710

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 April 2022 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.

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