



SAFETY DATA SHEET TRIFLURALIN 480 EC HERBICIDE

Section 1: Identification of the Substance and Supplier

Product name : TRIFLURALIN 480 EC
Chemical name of active Ingredient(s): 2,6-dinitroaniline derivative
Supplier: ADAMA New Zealand Limited
Level1/19 Elms Street, Wakatu Estate, Stoke, Nelson, New Zealand
P.O. Box 1799, Nelson New Zealand.
Telephone +64 3 543 8275 Fax: +64 3 543 8274
Emergency Telephone: 0800 POISON (0800 764 766)

Section 2: Hazards Identification

Hazard Classifications: 6.1D, 6.3B, 6.4A, 6.5B, 6.9A, 9.1A, 9.2A

Most important hazards: **TOXICITY**
Warning –
May be harmful if swallowed, inhaled or absorbed through the skin
May cause eye irritation and mild skin irritation.
May cause sensitisation from prolonged skin contact.
Danger -
Presumed to cause organ damage from repeated oral exposure at high doses.
Avoid contact with eyes and skin.

ECOTOXICITY
Toxic to aquatic organisms with long-lasting effects. Avoid contamination of any water supply with product or empty container.
Very toxic in the soil environment.

Section 3. Composition/Information on Ingredients

Substance/preparation	Preparation				
Information on hazardous ingredients *					
Common name	CAS No.	%	EC Number	Symbol	R-Phrases
Trifluralin	1582-09-8	48		Xn,N	R22, R36/38
Liquid Hydrocarbon	secret	46			
Other non hazardous ingred.	secret	to 100			

- **Occupational Exposure Limit(s), if available, are listed in section 8**

Section 4: First-Aid Measures

First-aid measures: Remove victim from area of exposure. Wash off remaining material with plenty of water.
Inhalation: Move victim to fresh air immediately. Begin artificial respiration if breathing has stopped.
Ingestion: If swallowed do NOT induce vomiting. Wash mouth with water and contact National Poisons Centre 0800 764 766 or a doctor
Remove contaminated clothing. Wash thoroughly with water and soap
Skin contact: Wash out with plenty of water with the eyelid held wide open for at least 15 minutes. Get medical attention.
Eye contact: Wash out with plenty of water with the eyelid held wide open for at least 15 minutes. Get medical attention.
Protection of first-aiders: Use appropriate protection (see section 8).



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Section 5: Fire-Fighting Measures

Extinguishing media

Suitable: Carbon dioxide, dry chemical, foam, water fog.
Hazardous thermal (de)composition products: Fire decomposition products from this product are likely to be toxic and corrosive if inhaled.
Protection of fire-fighters: Self-contained breathing apparatus and total protection required in enclosed areas.

Section 6: Accidental Release Measures

Personal precautions: Wear suitable protective clothing, including face mask, face shield and gauntlets. All skin areas should be covered.
Environmental precautions: Prevent spillage from entering drains or water courses.
Methods for cleaning up: Absorb remainder in sand, vermiculite or other inert material. Dispose of in an authorized waste collecting point.

Section 7: Handling and Storage

Handling: **Keep out of the reach of children**
Keep exposure to this product to a minimum, and minimise the quantities kept in work areas.
Storage: Store in the original, unopened container in a cool, dry place, out of direct sunlight, away from excessive heat, above 4°C and away from stockfeed or foodstuffs. As a Class 9 Substance with Ecotoxicity Classifications storage of Trifluralin Herbicide must be carried out in such a manner as to prevent contamination of waterways. It is recommended that The New Zealand Standard for the Management of Agrichemicals (NZS8409) is followed as a means of meeting the secondary containment provisions of the HSNO Emergency Management

Section 8: Exposure Controls/Personal Protection

Engineering measures: No special ventilation requirements are normally necessary for this product.
Hygiene measures: When handling do not eat, drink or smoke. Wash hands thoroughly after handling. Wash clothing separately before re-use.
Occupational Exposure Limits
Common name: Trifluralin
ADI 0.02mg/kg/day
NOEL 2.5mg/kg/day
Personal protective equipment:
Respiratory system: Respiratory protection is not required if good ventilation is maintained.
Skin and body: Wear protective clothing, and preferably an apron. Suggested protective clothing made of rubber or PVC.
Make sure all skin is covered
Hands: Impervious gloves.
Eyes: Protective glasses or safety goggles/face shield.

Section 9: Physical and Chemical Properties

Physical state: Liquid
Colour: Orange
Odour: Characteristic hydrocarbon odour
Boiling point: Not available
Vapour pressure: No data
Solubility in water: Emulsifiable
Octanol/water partition coefficient No data
pH: No data
Flammability: Not flammable
Explosion properties : Not Explosive
Oxidation properties: Not oxidizing



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Section 10: Stability and Reactivity

Stability:	Unlikely to react or decompose under normal storage conditions. Keep in cool place, preferably below 30°C.
Materials to avoid:	Keep away from sources of sparks or ignition and protect from light. Incompatible with: strong acids, strong bases, strong oxidizing agents
Hazardous reactions :	Sparks and ignition.
Hazardous decomposition Products:	Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke.
Polymerisation:	Nitrogen and its compounds and oxides of nitrogen's. Occasionally hydrogen cyanide gas. Unlikely to undergo polymerization processes.

Section 11. Toxicological Information

Acute toxicity - Oral:	LD ₅₀ (rat) > 10,000mg/kg LD ₅₀ (mice) > 5,000mg/kg
Acute toxicity - Dermal:	LD ₅₀ (rabbit) > 2,000 mg/kg
Acute toxicity – Inhalation:	LC ₅₀ (rat) > 5 mg/L (4 hours)
Skin irritation:	Does not cause skin irritation
Eye irritation:	Slightly irritating (rabbit).
Sensitization :	Skin sensitization (allergies) may occur in some individuals
Common name:	Trifluralin
Chronic toxicity:	NOEL (beagle dog): 18.75 mg/kg/day
Carcinogenicity:	2 year study (rat) 325 mg/kg/day
Mutagenicity:	Not mutagenic
Reproduction toxicity:	NOEL (rat): 225 mg/kg/day
Other information :	Teratogenicity – Does not appear to be teratogenic

Section 12: Ecological Information

Ecotoxicity:	Fish			
	LC ₅₀ (96 hours)	rainbow trout	=	0.02 – 0.06mg/L
		bluegill sunfish	=	0.05 – 0.07mg/L
		channel catfish	=	1.4-3.4 mg/L
	Daphnia similis			
	LC ₅₀ (48 hours)	=	0.5-.06 mg/L	
		Highly toxic to fish and aquatic organisms		
Common name:	Trifluralin			
Mobility:				
Persistence/degradability:	Moderate to high persistence in soil. Half-life time (t _{1/2}): 45 to 60 days to 6 to 8 months Subject to degradation by soil microorganisms. May be decomposed by UV light or may volatilize.			
Bioaccumulative potential:	Found adsorbed to soil sediments and particulates in the water columns			
	Toxic to fish and aquatic organisms. Toxic to Earthworms Non toxic: Bees			

Section 13: Disposal Considerations

Methods of disposal:	Container Disposal - Triple rinse empty container and add rinsate to spray tank. Burn in an appropriate incinerator, if circumstances such as wind direction permit. Otherwise crush or puncture and bury in a suitable landfill, or if appropriate, recycle. Avoid contamination of any water supply with product or empty container
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Section 14: Transport Information

UN Number	3082
Proper shipping name	Environmentally hazardous substance, Liquid, N.O.S,
DG Class	9
Packing Group	III
Hazchem Code	2X
Marine Pollutant	Yes
IER Guide page	47

National transport regulations: Do not carry this product on a passenger service vehicle.

Segregation: Check the land transport Rule Dangerous Goods 1999, Rule 45001 for additional information. Sea transport may require additional segregation. Refer: NZS5433; Sea Segregation, or the International Maritime Dangerous Goods Code for details.

Section 15: Regulatory Information

New Zealand Regulatory Information:

NZFSA Approval: Registered pursuant to the ACVM Act 1997, No. P7297
See www.nzfsa.govt.nz/acvm for registration conditions

Approved pursuant to the HSNO Act 1996, Approval No. HSR00576
See www.ermanz.govt.nz for approval controls

HSNO Classifications: 6.1D, 6.3B, 6.4A, 6.5B, 6.9A, 9.1A, 9.2A



ECOTOXIC

APPROVED HANDLER - this product must be under the care of an approved handler when it is applied in a wide dispersive manner or used by a commercial contractor.

RECORD KEEPING

Records of use must be kept under certain circumstances – see The New Zealand Standards for Management of Agrichemicals (NZS8409) for details.

Section 16: Other Information

Note: This product is a registered agricultural chemical and must be therefore be used in accordance with the container label directions. A comprehensive package of toxicological and environmental data for the active ingredients of this product has been submitted to the Government health and environment authorities and has been evaluated by expert toxicologists and environmental scientists.

The information contained in the Safety Data sheet is correct to the best of our knowledge at the date of issue. It is intended as a guide for the safe use, handling, disposal, storage and transportation and is not intended as a warranty or as a specification. The information relates only to the product specified and may not be suitable for combinations with other materials or in processes other than those specifically described herein.

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HISTORY

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