



SAFETY DATA SHEET

LINURON[®] 50DF

Date of Issue: 18 March 2021

1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

Chemical name of active ingredient(s): Linuron 50DF

Recommended use: Herbicide

Supplier: UPL New Zealand Limited
PO Box 51584, Pakuranga
Auckland
Phone 0800 100 325

Emergency telephone number: 0800 CHEM CALL (0800 243 622) 24 Hours

2. HAZARDS IDENTIFICATION

Hazard Classification: 6.1D (acute oral toxicant)
6.3B (skin irritant)
6.4A (eye irritant)
6.8B (reproductive/development toxin)
6.9A (target organ toxin)
9.1A (aquatic toxicant)
9.2A (soil toxicant)
9.3C (terrestrial vertebrate toxicant)

Required identification Details: WARNING – KEEP OUT OF REACH OF CHILDREN

May be harmful if swallowed, inhaled or absorbed through the skin.
May cause skin and/or eye irritation.
May cause reproductive/development damage from repeated exposure at high doses.
May cause organ damage from repeated oral exposure at high doses.
Very toxic to aquatic organisms.
Very toxic to the soil environment.
Harmful to terrestrial vertebrates.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation Information on hazardous ingredients

Common name	CAS No	%
Linuron (ISO)	330-55-2	50
Inert ingredients	not allocated	50

4. FIRST-AID MEASURES

Description of necessary first aid measures:

Effects and symptoms

First-aid measures

Inhalation:

Remove victim to fresh air. If breathing is difficult: artificial respiration. Get medical attention.

Ingestion:

Wash out mouth with plenty of water. Get medical attention. Never give anything by mouth to an unconscious person.

Skin contact:

Remove victim from area of exposure. Wash off remaining material with plenty of water. Remove contaminated clothing. Wash away remainder with water and soap.

Eye contact:

Wash out with plenty of water with the eyelid held wide open for at least 15 minutes. Get medical attention. For advice contact the National Poisons Centre 0800 POISON (0800 764 766)

Notes to a physician:

There is no specific antidote. Treat symptomatically and give supportive therapy.

5. FIRE-FIGHTING MEASURES

Extinguishing media:

Water spray, foam, dry chemical.

Hazardous thermal

(de)composition products:

Chloride compounds and nitrogen oxides

HAZCHEM Code:

2X

Protection of fire-fighters:

Wear self-contained breathing apparatus. Use water spray. Cool tank/container with water spray. If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Wear PVC overalls, chemical resistant gloves, facemask or goggles.

Environmental precautions:

Contain Spills. Do not discharge into drains, waterways, or the environment.

Methods for cleaning up:

Shovel or sweep up. DO NOT flush with water. Place material in a clean, dry container and cover for disposal. Wash contaminated areas with water and detergent. Prevent liquid from entering sewers, waterways or low areas. Soak up with sawdust, sand or other absorbent material. Shovel or sweep up. Never return to container for reuse. (See section 13 for disposal instructions.)

7. HANDLING AND STORAGE

Handling:

Avoid skin and eye contact. Avoid inhaling the vapour, or spray mist. Wash thoroughly after handling. Wash clothing after use.

Storage:

Store in the closed, original container in a dry, well ventilated area, as cool as possible out of direct sunlight and under lock and key. Keep from contact with fertilisers, fungicides and seeds.

Do not store with Classes 1,2,3,2,4 or 5 substances. Stores containing more than 100kg of this product, either alone or in aggregate with other hazardous substances are subject to requirement of an emergency management response plan, secondary containment and signage.

Packaging materials:

Plastic lined cardboard box.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace Exposure Guidelines

Exposure Standards: Not established.

Engineering measures

Exposure control measures: Ventilation required in enclosed areas.

Personal Protective Equipment

Detail specifications for equipment: Avoid breathing spray mist or dust. Use respiratory equipment suitable for herbicide dust if exposure may exceed AEL value (AEL: 2 mg/m³ (8 and 12 hr TWA). Avoid contact with eyes and skin. Wear protective goggles, rubber gloves, boots and overalls during handling and mixing.

Respiratory system: Respiratory protection is not required if good ventilation is maintained.

Skin and body: Wear long sleeved shirt, long pants.

Hands: Use gloves chemically resistant (eg: nitrile or neoprene) when prolonged or frequently repeated contact could occur

Eyes: Use safety glasses if exposure possible.

General hygiene: When handling, do not eat, drink or smoke. Wash hands thoroughly after handling. Wash clothing separately before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Colour, Odour. Solid, white to tan

pH: 7.3

Auto-ignition temperature: 320°C

Flash Point: Not flammable

Freezing/melting point: NA

Density:

Explosive properties: Not explosive

Oxidation properties: Not an Oxidizing Agent

Other Data:

10. STABILITY AND REACTIVITY

Stability: Stable at normal temperatures and storage conditions.

Flammable properties: Limits in Air, % by volume: LEL 0.12 g/L.

Conditions to avoid: Excess heat.

Fire/Explosion Hazard: Dust forms explosive mixture with air.

Materials to avoid: Oxidizing agents, acids and alkali.

Hazardous Decomposition

Products: Decomposition will not occur.

Hazardous polymerization: Polymerisation will not occur.

Hazardous reactions: None expected

11. TOXICOLOGICAL INFORMATION

Acute toxicity – Oral: Slightly toxic by ingestion.

Acute toxicity - Dermal:	None established for formulated product.
Acute toxicity – Inhalation:	Slightly to moderately toxic by contact. Tests indicate mild to no skin irritation and is not a skin sensitiser.
Skin irritation:	Produced mild to no conjunctival irritation. Eyes were normal within 4 days.
Eye irritation:	
Chronic toxicity	None established for formulated product.
Linuron:	In rats fed Linuron at 0, 50, 125 and 625 ppm for two years, a statistically significant increase in benign testicular interstitial cell adenomas was noted in mid and high dose males; in mice fed Linuron at 0, 50, 150, and 1,500 ppm for two years, a statistically significant increase in benign hepatocellular adenomas was noted in high dose females only. No increase in malignant tumours was seen in either species. Rats were fed at 0, 5, 125 and 625 ppm Linuron in the diet. Linuron was not embryotoxic or teratogenic at any level. No effects on reproduction were seen in a 3-generation rat reproduction study at 125 ppm.
Mutagenicity:	Negative results were obtained in the following assays: Rec-assay using two strains of Bacillus subtili. Reverse mutation tests with S. typhimurium (Ames Test). Host mediated assay using S. typhimurium. Point mutation test in Chinese Hamster ovaries (CHO). DNA damage and repair with rat hepatocytes in vitro. In vivo cytogenetic with bone marrow cells. None of the components in this material is listed by IARC, NTP OSHA, or ACGIH as a carcinogen.
Toxicity Data:	None established for formulated product.
Linuron:	Acute Oral LD50 (rat) 4,833 mg/kg (male); 4,060 mg/kg (female). Acute Dermal LD50 (rabbit) > 2,000 mg/kg Inhalation LC50 (rats) > 6.15mg/L air.

12. ECOLOGICAL INFORMATION

Linuron Fish

LC50 (96hr) rainbow trout and bluegill sunfish 16 mg/L
Channel catfish 1.2g/L Daphnia EC50 (48hr) 0.1-0.15 mg/L
Algae EC50 (120hr) 0.0137 mg/L (9.1A)
Very toxic to aquatic organisms. Avoid contamination of any water supply with chemical or empty container.
Herbicidal, soil DT50 38-67 days.

Birds

Log kow 3.2 (9.2A)
Bobwhite quail LD50 940mg/kg.
Dietary LC50 (8days)
mallard ducks 3,083mg/kg, > 5,000mg/kg for pheasants and Japanese quail. (9.3C)

Worms LC50 > 1,000mg/kg soil.

13. DISPOSAL CONSIDERATIONS

Methods of disposal: Ensure bag is completely empty and dispose of at an

approved landfill. Dispose of this product only by using in accordance with label directions. Dispose of solid contaminated material/or contaminated soil in an approved landfill. Disposal must be in accordance with applicable local regulations.

14. TRANSPORT INFORMATION - International transport regulations

UN number: UN3077
Class or Division: 9
Subsidiary Class: NA
Packing Group: III
Marine Pollutant: Yes
Proper shipping name: Environmentally hazardous substance, Solid, N.O.S. Linuron

15. REGULATORY INFORMATION

ACVM Registered Number: P000565
HSNO Approval Code: HSR000229

16. OTHER INFORMATION

Additional information: **Original Issue Date:** 27 September 2010
Revision Date: 19 March 2021
Replaces: ES397

Disclaimer EXCLUSION OF LIABILITY: PLEASE READ

This Safety Data Sheet is based on the most recent information available. To the extent permitted by law, users of this information accept that neither the manufacturer, UPL New Zealand Limited as distributor, nor any other distributor have any liability or responsibility whatsoever for any loss, damage or injury whether in contract or tort, whether direct, indirect or consequential howsoever arising in connection with the supply of these information.