


Infosafe No™ 3NUCH	Issue Date : June 2021	ISSUED by NUFARMNZ
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 Product Name **THIRAM 40F**

1. Identification

GHS Product Identifier	THIRAM 40F
Product Code	03072
Product Type	Fungicide
Company Name	Nufarm NZ
Address	6 Manu Street, Otahuhu Auckland 2024 New Zealand
Telephone/Fax Number	Tel: 0-9-270 4150
Emergency phone number	0800 651 911
E-mail Address	nzinfo@nufarm.com
Recommended use of the chemical and restrictions on use	A broad spectrum protectant fungicide for use on fruit, vegetables, ornamentals and amenity turf.
Other Information	This SDS describes, to the best of our knowledge, the properties of the concentrated product. The physical properties and some of the assessments do not apply to the properties of the product once it has been diluted for application. Acute health effects of the diluted product are likely to be much less severe.

2. Hazard Identification

GHS classification of the substance/mixture	Classified as Hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017, New Zealand. Classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433:2020 Transport of Dangerous Goods on Land.
Signal Word (s)	WARNING
Hazard Statement (s)	H302 Harmful if swallowed. H312 Harmful in contact with skin. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H332 Harmful if inhaled. H361 Suspected of damaging fertility or the unborn child. H373 May cause damage to organs through prolonged or repeated exposure. H410 Very toxic to aquatic life with long lasting effects. H432 Toxic to terrestrial vertebrates.
Precautionary statement – General	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read label before use.
Pictogram (s)	Exclamation mark, Health hazard, Environment
	
Precautionary statement – Prevention	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P260 Do not breathe dust/fume/gas/mist/vapours/spray. P264 Wash face and hands thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statement – Response	P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. P302+P352 IF ON SKIN: Wash with plenty of water.

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P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 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.
 P308+P313 IF exposed or concerned: Get medical advice/attention.
 P330 Rinse mouth.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P391 Collect spillage.
 P405 Store locked up.

Precautionary statement – Storage
Precautionary statement – Disposal
Other Information

P501 Dispose of contents/container to an approved landfill as per label directions.
 6.1D acute toxicant, 6.3B skin irritant, 6.4A eye irritant, 6.5B sensitiser, 6.9B target organ toxicant, 9.1A aquatic toxicant, 9.3C terrestrial vertebrate toxicant,

3. Composition/information on ingredients

Ingredients	Name	CAS	Proportion
	Thiram	137-26-8	400 g/L
	Ingredients determined to be non-hazardous	-	Balance

4. First-aid measures

First Aid Measures For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. Begin artificial respiration if the victim is not breathing. Use mouth-to-nose rather than mouth-to-mouth. Obtain medical attention.

Inhalation Remove patient to fresh air. Lay down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately.

Ingestion Never give anything by mouth to an unconscious person. If swallowed do NOT induce vomiting. For advice, contact the National Poisons Centre (0800 764 766). Seek medical assistance immediately.
 NB: Inform doctor if patient has consumed alcohol within 48 hours.

Skin Immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Wash affected areas with soap and water. If a large area is affected seek medical assistance.

Eye contact Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Seek medical assistance. Remove contact lenses, if present and easy to do.

First Aid Facilities Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.

Advice to Doctor Treat symptomatically.
 If ingested, wash out the stomach, administer saline laxatives, provide circulatory support, etc.
 Prohibit ethyl alcohol in all forms for at least 10 days.

5. Fire-fighting measures

Suitable extinguishing media Water fog, foam, carbon dioxide or dry chemical.

Hazards from Combustion Products If involved in a fire, it may emit toxic fumes of carbon disulphide - formed from unburned material; and oxides of nitrogen, sulphur and carbon.

Special Protective Equipment for fire fighters Full protective clothing and self-contained breathing apparatus.

Specific Methods Keep up wind. Do not allow washings to reach sewage or effluent systems.

Hazchem Code 2Z

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Decomposition Temp. Information not available.

Other Information Location Certificate: Not applicable
Hazardous Atmosphere Zone: Not applicable
Number of Fire Extinguishers: Not applicable

6. Accidental release measures

Spills & Disposal Wear protective clothing. Clear area of unprotected personnel. Contain spill and absorb with sand, soil or absorbent granules. If spill does enter waterways contact the local authority. Collect in an appropriate sealable container for disposal in an approved landfill.

Personal Protection For appropriate personal protective equipment (PPE), refer Section 8.

Environmental Precautions Prevent from entering drains, waterways or sewers.

7. Handling and storage

Precautions for Safe Handling Do not handle until all safety precautions have been read and understood. The person mixing or applying THIRAM 40F must be a 'Qualified Contractor' or 'Qualified Loader'. For more information refer to the Hazardous Substances Property Controls Notice 2017. It is the duty of the PCBU that a person who uses, handles, manufactures or stores a hazardous substance (including hazardous waste) is provided information, instruction and training in accordance with Regulation 4.5 of the Health and Safety at work (Hazardous Substances) Regulations 2017.
This product must not be applied into or onto water.
Avoid skin and eye contact and inhalation of spray mist.
CERTIFIED HANDLER : Is not required.
TRACKING : Is not required.

Conditions for safe storage, including any incompatibilities Keep out of reach of children.
Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs. Storage must be in accordance with NZS 8409 Management of Agrichemicals.

Stores containing 100L of THIRAM 40F require secondary containment and are subject to signage, and more than 100L require emergency response plans.

Other Information Always read the label and any attached leaflet before use.

Aggregate Storage Volume Thresholds:
When stored with substances of the same hazard classification the aggregate quantity must be considered. For full details refer to the current NZS8409 Management of Agrichemicals and the HSNO Regulations.

8. Exposure controls/personal protection

Occupational exposure limit values No exposure limits (WES, TEL or EEL's) have been specifically assigned for this product.
WES TWA for thiram = 1mg/m³

Appropriate engineering controls Handle in well ventilated areas, generally natural ventilation is adequate.

Personal Protective Equipment When opening the container, preparing spray and using the prepared spray wear safety goggles, waterproof gloves, cotton overalls buttoned to the neck and wrist, boots, and a NIOSH approved half face mask with organic vapour cartridge + dust/mist prefilter.

Hygiene Measures Do not eat, drink or smoke while using.
Remove protective clothing and wash hands and face thoroughly before meals and after work. Wash protective clothing daily after work.

9. Physical and chemical properties

Form Liquid

Appearance Homogeneous cream liquid

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Decomposition Temperature	Information not available.
Freezing Point	Information not available.
Solubility in Water	Miscible
pH	6.5 - 8.5
Vapour Pressure	Negligible at room temperature
Vapour Density (Air=1)	Information not available.
Partition Coefficient: n-octanol/water	Kow LogP=2.1
Density	1.13g/mL @ 20°C
Flash Point	N/A
Flammability	Non flammable.
Auto-Ignition Temperature	Information not available.
Flammable Limits - Lower	N/A
Flammable Limits - Upper	N/A
Initial boiling point and boiling range	Information not available.
Kinematic Viscosity	Information not available.
Other Information	(SC) Suspension Concentrate

10. Stability and reactivity

Chemical Stability	Stable under normal conditions of handling and storage.
Conditions to Avoid	Decomposes under acidic conditions. Product may deteriorate on prolonged exposure to heat, air or moisture.
Incompatible Materials	Reacts vigorously with oxidizing material. Do not mix with Bordeaux mixture, copper compounds, lime sulphur or alkaline materials such as hydrated lime.
Hazardous Polymerization	Hazardous polymerisation will not occur.

11. Toxicological Information

Toxicology Information	No specific toxicological data is available for this product. Data below is for constituents.
Acute Toxicity - Oral	LD50 (rat) 1,800 mg/kg for thiram LD50 (rabbit) 210mg/kg for thiram
Acute Toxicity - Dermal	LD50 (rat) >1,000 mg/kg for thiram
Acute Toxicity - Inhalation	LC50 (rat) (4hr) 0.5 mg/l for thiram
Ingestion	Harmful if swallowed.
Inhalation	Harmful if inhaled. Irritating to respiratory tract.
Skin	Irritating. May cause sensitization by skin contact.
Eye	Irritating.
Respiratory sensitisation	Based on available data classification criteria is not met.
Germ cell mutagenicity	Based on available data classification criteria is not met.

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Carcinogenicity	Based on available data classification criteria is not met.
Reproductive Toxicity	Suspected of damaging fertility or the unborn child.
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure
Health Hazard	Symptoms of poisoning may be one or more of the following; dermatitis, nausea, vomiting, diarrhoea, hyperexcitability, weakness and uncoordination. In association with alcohol thiram causes violent nausea, vomiting and collapse.
Chronic Effects	May cause damage to the heart, kidneys and cardiovascular system from repeated oral exposure at high doses.
Respiratory Irritation	Based on available data classification criteria is not met.
Subchronic/Chronic Toxicity	Thiram NOEL for rats is 2.5mg/kg daily, for dogs 2.2mg/kg daily. In percutaneous toxicity tests in humans, application of thiram dry powder to the skin produced very slight erythema in 9% of cases.
Other Information	The Australian Acceptable Daily Intake (ADI) for thiram for a human is 0.004 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 0.4 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Comm. Dept. of Health and Ageing, Office of Chemical Safety, 'ADI List', December 2020).

12. Ecological information

Persistence and degradability	Not rapidly degradable.
Mobility	Information not available.
Environmental Fate	In plants the major metabolite is ethylene thiourea, followed by ethylene thiuram monosulphide, and presumably ethylene thiuram disulphide and sulphur.
Bioaccumulative Potential	This material has a small potential to bioaccumulate in aquatic species.
Basis for Assessment	Ecotoxicological data have not been determined specifically for this product. Data below is for the active ingredient unless otherwise stated.
Acute Toxicity - Fish	LC50 (96h) common mirror coloured carp = 0.3µg/L
Acute Toxicity - Algae	EC50 Selenastrum capricornutum (5d) = 0.045 ppm
Acute Toxicity - Other Organisms	LC50 (96h) mysid (crustacean) 3.36ppb for thiram Not toxic to bees.
Other Information	Non phytotoxic.

13. Disposal considerations

Product Disposal	Dispose of product only by using according to the label, or at an approved landfill.
Container Disposal	Triple rinse empty container and add rinsate to spray tank. Recycle empty container. Otherwise crush and bury in a suitable landfill.

14. Transport information

Transport Information	It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs.
U.N. Number	3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. - (thiram)
Transport hazard class(es)	9
Hazchem Code	2Z
Packaging Method	-

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Packing Group	III
EPG Number	-
IERG Number	47
IMO Marine Pollutant	Yes. Environmentally Hazardous Substance mark required.
IMDG EMS	F-A, S-F
Other Information	Do not carry more than 1L of THIRAM 40F on a passenger service vehicle.

Segregation: Check the latest Land Transport Rule Dangerous Goods Rule 45001 for additional information. Sea transport may require additional segregation. Refer NZS5433 sea segregation for details.

15. Regulatory information

National and or International Regulatory Information	Registered pursuant to the ACVM Act 1997, No. P4114 See www.foodsafety.govt.nz for registration conditions Approved pursuant to the HSNO Act 1996, Approval Code HSR000475 See www.epa.govt.nz for approval controls.
Hazard Rating Systems	NFPA/HMIS: 2-1-1

16. Other Information

Contact Person/Point	IN AN EMERGENCY, DIAL 111 - FIRE OR POLICE 24Hr Tollfree Emergency No: 0800 651 911 24Hr Emergency No: National Poisons Centre Phone: 0800 764 766
Revisions Highlighted	5 Yearly review carried out. Minor changes and updates made to the document.
Other Information	Supersedes SDS issued June 2016 ...End Of MSDS...

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