

Infosafe No™ 3NUCH	Issue Date : June 2016	ISSUED by NUFARMNZ
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 Product Name **THIRAM 40F**

## 1. Identification

<b>GHS Product Identifier</b>	THIRAM 40F
<b>Product Code</b>	03072
<b>Product Type</b>	Fungicide
<b>Company Name</b>	Nufarm NZ
<b>Address</b>	6 Manu Street, Otahuhu Auckland 2024 New Zealand
<b>Telephone/Fax Number</b>	Tel: 0-9-270 4150 Fax: 0-9-270 4159
<b>Emergency phone number</b>	0800 651 911
<b>Recommended use of the chemical and restrictions on use</b>	A broad spectrum protectant fungicide for use on fruit, vegetables, ornamentals and amenity turf.
<b>Other Information</b>	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

<b>Other Information</b>	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, TOXICITY Harmful - may be harmful if swallowed, inhaled or absorbed through the skin. May cause irritation to eyes, nose, throat and skin of sensitive persons. May cause sensitisation from prolonged skin contact. May cause damage to the heart, kidneys and cardiovascular system from repeated oral exposure at high doses. ECOTOXIC Very toxic to aquatic organisms. Harmful to terrestrial vertebrates.
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## 3. Composition/information on ingredients

<b>Chemical Characterization</b>	Liquid		
<b>Ingredients</b>	<b>Name</b>	<b>CAS</b>	<b>Proportion</b>
	Thiram	137-26-8	400 g/L
	Ingredients determined to be non-hazardous	-	Balance

## 4. First-aid measures

<b>First Aid Measures</b>	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.
<b>Inhalation</b>	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.
<b>Ingestion</b>	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.
<b>Skin</b>	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.
<b>Eye contact</b>	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.

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**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** 2X

**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** Avoid skin and eye contact and inhalation of spray mist.  
APPROVED HANDLER: This product must be under the control of an approved handler when applied in a wide dispersive manner; or used by a commercial contractor.  
TRACKING: Is not required  
RECORD KEEPING: Records of use as described in NZS 8409 Management of Agrichemicals must be kept if 3L or more is applied within 24 hours.

**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.

**Other Information** Stores containing 100L of THIRAM 40F require secondary containment and are subject to signage, and more than 100L require emergency response plans.  
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/m<sup>3</sup>

**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.

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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

<b>Form</b>	Liquid
<b>Appearance</b>	Homogeneous cream liquid
<b>Solubility in Water</b>	Miscible
<b>Specific Gravity</b>	1.13g/mL @ 20°C
<b>pH</b>	6.5 - 8.5
<b>Vapour Pressure</b>	Negligible at room temperature
<b>Flammability</b>	Non flammable.
<b>Other Information</b>	(SC) Suspension Concentrate

## 10. Stability and reactivity

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

## 11. Toxicological Information

<b>Toxicology Information</b>	No specific toxicological data is available for this product. Data below is for constituents.
<b>Acute Toxicity - Oral</b>	LD50 (rat) 1,800 mg/kg for thiram LD50 (rabbit) 210mg/kg for thiram
<b>Acute Toxicity - Dermal</b>	LD50 (rat) >1,000 mg/kg for thiram
<b>Acute Toxicity - Inhalation</b>	LC50 (rat) (4hr) 0.5 mg/l for thiram
<b>Ingestion</b>	Harmful if swallowed.
<b>Inhalation</b>	Harmful if inhaled. Irritating to respiratory tract.
<b>Skin</b>	Irritating. May cause sensitization by skin contact.
<b>Eye</b>	Irritating.
<b>Health Hazard</b>	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.
<b>Chronic Effects</b>	May cause damage to the heart, kidneys and cardiovascular system from repeated oral exposure at high doses.
<b>Subchronic/Chronic Toxicity</b>	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.
<b>Other Information</b>	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 2014).

## 12. Ecological information

<b>Persistence and degradability</b>	Not rapidly degradable.
<b>Environmental Fate</b>	In plants the major metabolite is ethylene thiourea, followed by ethylene thiuram monosulphide, and presumably ethylene thiuram disulphide and sulphur.
<b>Bioaccumulative Potential</b>	This material has a small potential to bioaccumulate in aquatic species.

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<b>Basis for Assessment</b>	Ecotoxicological data have not been determined specifically for this product. Data below is for the active ingredient unless otherwise stated.
<b>Acute Toxicity - Fish</b>	LC50 (96h) common mirror coloured carp = 0.3µg/L
<b>Acute Toxicity - Algae</b>	EC50 Selenastrum capricornutum (5d) = 0.045 ppm
<b>Acute Toxicity - Other Organisms</b>	LC50 (96h) mysid (crustacean) 3.36ppb for thiram Not toxic to bees.
<b>Other Information</b>	Non phytotoxic.

### 13. Disposal considerations

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

### 14. Transport information

<b>Transport Information</b>	It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs.
<b>U.N. Number</b>	3082
<b>UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. - (thiram, 40%)
<b>Transport hazard class(es)</b>	9
<b>Hazchem Code</b>	2X
<b>Packaging Method</b>	-
<b>Packing Group</b>	III
<b>EPG Number</b>	-
<b>IERG Number</b>	47
<b>IMO Marine Pollutant</b>	Yes. Environmentally Hazardous Substance mark required.
<b>IMDG EMS</b>	F-A, S-F
<b>Other Information</b>	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

<b>National and or International Regulatory Information</b>	Registered pursuant to the ACVM Act 1997, No. P4114 See <a href="http://www.foodsafety.govt.nz">www.foodsafety.govt.nz</a> for registration conditions Approved pursuant to the HSNO Act 1996, Approval Code HSR000475 See <a href="http://www.epa.govt.nz">www.epa.govt.nz</a> for approval controls.
<b>Packaging &amp; Labelling</b>	HARMFUL * ECOTOXIC - keep out of reach of children
<b>Hazard Rating Systems</b>	NFPA/HMIS: 2-1-1

### 16. Other Information

<b>Contact Person/Point</b>	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 5 Yearly review carried out. Minor changes and updates made to the document.
<b>Revisions Highlighted</b>	
<b>Other Information</b>	Supersedes SDS issued June 2011  ...End Of MSDS...



# Safety Data Sheet

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