

**SAFETY DATA SHEET
DITHANE NT**

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Issued: 27/09/2012
Revision Date: 22/03/2013
Ref: MCZ/03750/5
Safety Data Sheet according to
Regulation (EC) No. 1907/2006

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- | | |
|--|--|
| 1.1. Product identifier | DITHANE NT |
| 1.2. Relevant identified uses of the substance or mixture and uses advised against | Fungicide |
| 1.3. Details of the Marketing company in UK | Interfarm UK Ltd,
36 Newgate Street,
Doddington,
Cambs.
www.interfarm.co.uk |
| 1.4. Emergency telephone number | +44(0) 01354 741414 |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture:

Classification according to Directive 67/548/EEC [DSD]

- | | |
|--------------------------------|--|
| Indications of danger : | Repr. Cat. 3, Dangerous for the environment |
| R-phrases: | R63: Possible risk of harm to the unborn child
R43: May cause sensitisation by skin contact
R50: Very toxic to aquatic organisms |

Classification according to Regulation (EC) No 1272/2008[CLP/GHS]

Hazard categories:

- | | |
|------------------------------|--|
| Health hazards | Respiratory/skin sensitization: Skin Sens. 1
Reproductive toxicity: Repr. 2 |
| Environmental hazards | Hazardous to the aquatic environment: Aquatic Acute 1 |
| Hazard Statements: | H317: May cause an allergic skin reaction.
H361d : Suspected of damaging the unborn child.
H400: Very toxic to aquatic life. |

2.2 Label elements

Label elements according to Directive 67/548/EEC [DSD]

Classification: Harmful, Dangerous for the environment

Symbols:



Xn : Harmful
N : Dangerous for the environment

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Risk phrases: R63: Possible risk of harm to the unborn child
 R43: May cause sensitisation by skin contact
 R50: Very toxic to aquatic organisms

Safety phrases: S2: Keep out of the reach of children
 S35: This material and its container must be disposed of in a safe way.
 S36/37: Wear suitable protective clothing and gloves.
 S46: If swallowed, seek medical advice immediately and show this container or label.
 S57: Use appropriate containment to avoid environmental contamination.
 S61: Avoid release to the environment. Refer to special instructions/safety data sheet

Label elements according to Regulation (EC) No 1272/2008[CLP/GHS]

Signal word: Warning

Pictograms: GHS07-GHS08-GHS09



Hazard statements: H317: May cause an allergic skin reaction.
 H361d : Suspected of damaging the unborn child.
 H400: Very toxic to aquatic life.

Precautionary statements: P201: Obtain special instructions before use.
 P202: Do not handle until all safety precautions have been read and understood.
 P261: Avoid breathing dust.
 P273: Avoid release to the environment.
 P280: Wear protective gloves/protective clothing/eye protection/face protection.
 P302+P352: IF ON SKIN: Wash with plenty of soap and water.
 P308+P313: IF exposed or concerned: Get medical advice/attention.
 P405: Store locked up
 P501: Dispose of contents/container to in accordance with local and national regulations

2.3 Other hazards: Risk of dust explosion

SECTION 3: Composition/information on ingredients

Hazardous ingredients

Chemical name	%	CAS	ELINECS	Index Nr. Regulation (EC) No1272/2008 Annex VI	Classification 67/548/EEC [DSD]	Classification Regulation (EC) No 1272/2008 [CLP]
Mancozeb	75	8018-01-7	--	006-076-00-1	[Xn]: Repr. Cat.3 N: R63-43-50	Repr. 2, Skin Sens. 1, Aquatic Acute 1; H361d - H317 -H400
Inert ingredients	25		--	--	--	

For the complete text of R phrases and H statements, please refer to section 16.

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SECTION 4: First aid measures

4.1. Description of first aid measures

In general	Never give fluids or induce vomiting if patient is unconscious or is having convulsions.
After Ingestion	Do not induce vomiting. Provided the patient is conscious, wash mouth with water and give plenty of water to drink. Consult a physician. The decision of whether to induce vomiting or not should be made by a physician.
After eye contact	Flush eyes thoroughly with water for several minutes. Remove contact lenses after initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.
After skin contact	Immediately wash skin with soap and plenty of water. Consult a physician if irritation develops.
After Inhalation	Remove to fresh air. Consult a physician if irritation develops

4.2. Most important symptoms and effects, both acute and delayed

Skin contact	There may be mild irritation at the site of contact
Eye contact	There may be irritation and redness. The vision may become blurred
Ingestion	There may be soreness and redness of the mouth and throat

4.3. Indication of any immediate medical attention and special treatment needed

Supportive care. Treatment based on judgement of physician In response to symptoms of patient

Emergency Personnel Protection

If potential for exposure exists refer to Section 8 for specific personal protective equipment. First Aid responders should pay attention to self-protection and use the recommended protective clothing.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media	Water spray. Carbon dioxide. Dry chemical powder. Alcohol or polymer foam
Unsuitable extinguishing media:	None or Full water jet.
5.2. Special hazards arising from the substance or mixture	During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/ or irritating. Combustion products include: Hydrogen sulphide. Carbon disulphide. Nitrogen oxides. Sulphur oxides. Carbon oxides
5.3. Advice for fire-fighters	Wear protective clothing and self-contained breathing apparatus. Run-off from fire control may be a pollution hazard. If area is not too heavily exposed to fire, and if conditions permit, let fire burn itself out, since water may increase the contamination hazard.
Special Protective Equipment for Firefighters:	Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full

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chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

Additional Information

Do not permit dust to accumulate. Dust layers can be ignited by spontaneous combustion or other ignition sources. When suspended in air dust can pose an explosion hazard. Keep containers cool by spraying with water. Contain runoff to prevent entry into water or drainage systems. Avoid breathing smoke. Work upwind of any spill.

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures** Eliminate all sources of ignition. Do not create dust. Wear appropriate safety clothing and eye/face protection (see Section 8). Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse or dispose of properly.
- 6.2. Environmental precautions** Do not discharge into drains or rivers. Contain the spillage using bunding. Advise water authority if spillage has entered water course or drainage system.
- 6.3. Methods and material for containment and cleaning up** Spills should be cleaned up immediately using care to minimise generation of airborne dust. Do not use equipment in clean-up procedure which may produce sparks. Collect all waste material and place in closable marked containers. For large spills, barricade area and consult manufacturer. Transfer to a closable, labeled salvage container for disposal by an appropriate method.
- 6.4. Reference to other sections** See Section 1 for emergency contact information
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling** Use good personal hygiene. Do not consume or store food in the work area. Proper ventilation is recommended to control dust formation. Transfer equipment should be grounded and bonded to avoid static charge and spark-proof equipment should be used. Wash hands and exposed skin before eating, drinking or smoking and after work.
- 7.2. Conditions for safe storage, including any incompatibilities** Product should be stored in compliance with local regulations. Store in a cool, dry, well-ventilated place in the original container. This product is combustible and should not be exposed to flames or other ignition sources. Do not allow material to become wet or overheated in storage; decomposition, impaired activity or fire may result. Do not store near food, drink, animal feeding stuffs, pharmaceuticals, cosmetics or fertilisers. Keep out of reach of children
- 7.3. Specific end uses** Must only be kept in original packaging

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters**
8.2. Exposure control

Control of professional exposure Provide appropriate exhaust ventilation at machinery and at places where dust can be generated

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Personal Protection:

Respiratory protection	Wear dual cartridge respirator for dusts and mists. For most conditions, no respiratory protection should be needed. However, when airborne exposure guidelines and/or comfort levels may be exceeded use an approved air-purifying respirator. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus.
Hand /Skin protection	<p>For brief contact, no precautions other than clean body-covering clothing and chemical resistant gloves should be needed. Use chemical resistant gloves classified under standard EN 374: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Nitrile. Polyvinyl chloride ('PVC' or "vinyl"). Neoprene.</p> <p>When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374) is recommended.</p> <p>NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all requisite workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), as well as the instructions/specifications provided by the glove supplier.</p> <p>When prolonged or frequently repeated contact could occur, use protective clothing impervious to this material. For emergency conditions: Use protective clothing impervious to this material. Selection of specific items will depend on operation.</p>
Eyes/Face protection	Safety glasses should be sufficient for most operations; however, for dusty operations wear chemical goggles
Engineering Controls	Ventilation: Use engineering controls to maintain airborne level below exposure limit requirements or guidelines. If there is no applicable exposure limit requirements or guidelines, use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:	Granules
Colour	Greenish yellow to light yellow
Odour	Sulphurous
Odour threshold	no data available
pH-value	no data available
Melting/Decomposition temp	Not applicable/decomposes 192-204 deg.C
Boiling point	no data available
Flash Point	no data available
Evaporation rate	no data available
Flammability	not applicable
Upper/lower flammability or explosive limits	no data available
Vapour pressure	Negligible
Relative density	no data available
Solubility in water	Dispersible

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Partition coefficient: n-octanol/water	no data available
Auto-ignition temperature	no data available
Viscosity	no data available
Explosive properties	no data available
Oxidising properties	no data available

9.2. Other information no data available

SECTION 10: Stability and reactivity

10.1. Reactivity	No dangerous reactions known under conditions of normal use
10.2. Chemical stability	Stable under normal conditions
10.3. Possibility of hazardous reactions	Acids and moisture (in storage). Excessive heat. Open flames
10.4. Conditions to avoid	Acids and moisture (in storage). Excessive heat. Open flames
10.5. Incompatible materials	Acids
10.6. Hazardous decomposition products	None under normal conditions of storage and use. Thermal decomposition products include Hydrogen sulphide. Carbon di Sulphide

SECTION 11: Toxicological information

Hazard classes¹	
Hazardous ingredients	Assessment largely or completely based on data for active substance.
Acute toxicity	
by ingestion (rat)	Low toxicity if swallowed. The oral LD50 for rats is >5000 mg/kg
by skin contact (rat)	The dermal LD50 for rats is >5000 mg/kg. Prolonged skin contact is unlikely to result in absorption of harmful amounts
by inhalation (rat)	No adverse <i>effects</i> anticipated by this route of exposure incidental to proper handling. The LC50, 4 h for inhalation in rats is >5.14 mg/L.
Skin irritation (rabbit)	Essentially non-irritating to the skin.
Eye irritation (rabbit)	May cause eye irritation
Skin sensitization (guinea-pig)	Sensitising to guinea pig skin.
Subchronic toxicity	No data available
Chronic toxicity	
Carcinogenicity	Not classified as: Carcinogenic.
Teratology	Not classified as: Teratogenic.
Toxicity to reproduction	No data available
Mutagenicity effects	Not classified as: Mutagenic.
Other	

¹ As defined in Regulation (EC) 1272/2008

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SECTION 12: Ecological information

12.1. Toxicity:

Assessment largely or completely based on data for active ingredient

Aquatic organisms	Fishes	Acute (96h)	Material is very toxic to fish (LC ₅₀ <1.0 mg/L).
	Rainbow trout		
	Daphnia magna	Acute (48h)	Material is very toxic to aquatic invertebrates (EC ₅₀ <1.0 mg/L).
	Algae	Acute (72h)	Material is very toxic to algae (EC ₅₀ <1.0 mg/L).
Terrestrial organisms	Birds	Acute	Material is practically non-toxic to birds (LD50 > 2000 mg/kg)
	Honeybees	Acute	Material is non-toxic to bees oral LD50 > 100 µg/bee contact LD50 > 100 µg/bee

12.2. Persistence and degradability Half-life in soils is dependent on soil type and conditions and is approximately 6-15 days

12.3. Bio-accumulation potential Bio-concentration potential is low.
Partition coefficient, n-octanol/water (log Pow): 1.38

12.4. Mobility in soil Potential for mobility in soil is low.
Partition coefficient, soil organic carbon/water (Koc): 1000 Estimated

12.5. Results of PBT and vPvB assessment According to Directive 1907/2006/EC (REACH) none of the substances, contained in this product is considered to be persistent, bioaccumulating and toxic (PBT).

According to Directive 1907/2006/EC (REACH) none of the substances, contained in this product is considered to be very persistent and very bioaccumulating (vPvB).

12.6. Other adverse effects Very toxic to aquatic organisms.
Hazardous water pollutant

SECTION 13: Disposal considerations

13.1. Waste treatment methods Very toxic to aquatic organisms. Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product may be disposed of at an approved waste disposal facility
The user's attention is drawn to the possible existence of regional or national regulations regarding disposal


Product/packaging Dispose of in a regulated landfill site or other method for hazardous or toxic wastes

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SECTION 14: Transport information


Land transport (ADR/RID):

14.1. UN number 3077
14.2. UN proper shipping name Environmentally hazardous substance, solid, n.o.s. Mancozeb (ISO)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
14.5 Environmental hazards: Environmentally hazardous
Hazard label: 
14.6 Special precautions for user
Classification code: M7
Limited quantity: 5 kg
Transport category: 3
Hazard No: 90
Tunnel restriction code: E

Inland waterways transport:

14.1. UN number 3077
14.2. UN proper shipping name Environmentally hazardous substance, solid, n.o.s. Mancozeb (ISO)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
14.5 Environmental hazards: Marine pollutant
Hazard label: 
14.6 Special precautions for user
Classification code: M7
Limited quantity: LQ27

Marine transport (IMDG):

14.1. UN number 3077
14.2. UN proper shipping name Environmentally hazardous substance, solid, n.o.s. Mancozeb (ISO)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
14.5 Environmental hazards: Marine pollutant
Hazard label: 

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14.6 Special precautions for user

Classification code:	M7
Limited quantity:	5 kg / 30 kg
EmS:	F-A, S-F

Air transport (ICAO)

14.1. UN number	3077
14.2. UN proper shipping name	Environmentally hazardous substance, solid, n.o.s. Mancozeb (ISO)
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
14.5 Environmental hazards:	Environmentally hazardous
Hazard label:	9



14.6 Special precautions for user

Limited quantity Passenger:	Y956 / 30 kg G
IATA-packing instructions	Passenger: 956
IATA-max. quantity	Passenger: 400 kg
IATA-packing instructions	Cargo: 956
IATA-max. quantity	Cargo: 400 kg

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture

1999/13/EC (VOC):	0%
European Inventory of Existing Commercial Chemical Substances (EINECS)	The components of this product are on the EINECS inventory or are exempt from inventory requirements
Employment restrictions:	Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing
Water: contaminating class (D):	w ater contaminating

15.2 Chemical Safety Assessment To avoid risks to man and the environment, comply with the instructions for use. For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

SECTION 16: Other information

Risk phrases used in s.2: R43: May cause sensitisation by skin contact
R63: Possible risk of harm to the unborn child
R50: Very toxic to aquatic organisms

H-Statements :

H317 : May cause an allergic skin reaction.
H361d : Suspected of damaging the unborn child.
H400 : Very toxic to aquatic life

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Legal disclaimer:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The company, Indofil Industries Limited shall not be held liable for any damage resulting from handling or from contact with the above product.

**Details of the
Manufacturer**

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