Product code Thiophanate-Methyl 70WP(deAPE) 1/8

Safety data sheet in accordance with Regulation (EC) No 1907/2006

Prepared : July 15, 2016

Version : 1 Revised :

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Thiophanate-Methyl 70WP

- 1.2 Relevant identified uses of the substance or mixture and use advised against Fungicide for agriculture use
- 1.3 Details of the supplier of the safety data sheet
- 1) Distributor's Name : Nisso Chemical Europe GmbH

Address : Berliner Allee 42 40212 Düsseldorf

Germany

Telephone Number : +49-(0)211-130 66 86 0

Telefax Number : +49-(0)211-328231

Email: : <u>sds@nisso-chem.de</u>

2) Manufacturer's Name : NIPPON SODA Co., Ltd.

Address : 2-1, Ohtemachi 2-Chome, Chiyoda - ku, Tokyo 100-8165, JAPAN

Telephone Number : +81-3-3245-6041

Telefax Number : +81-3-3245-6287

E-Mail Address : <u>ml-sds@hon1.nippon-soda.co.jp</u>

1.4 Emergency Telephone Number: CHEMTREC +1-703-741-5970 (24-hour)

2. HAZARDS IDENTIFICATION

2.1 Classification of the mixture

Classification according to Regulation (EC) No 1272/2008			
Acute Tox.4	H332	Harmful if inhaled	
Muta.2	H341	Suspected of causing genetic defects	
Carc 1A	H350	May cause cancer	
STOT RE2	H373	May cause damage to lung(inhalation) through prolonged or repeated exposure	
Aquatic chronic 2	H411	Toxic to aquatic life with long lasting effects	
EUH208 Contains Thiophanate-methyl. May produce an allergic reaction.			

EUH401 To avoid risks to human health and the environment, comply with the instructions for use

2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008

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Hazard picto	ogram GHS07, GHS08, GHS09
Signal word	Danger
Hazard state	ement
H332	Harmful if inhaled
H341	Suspected of causing genetic defects

H350 May cause cancer

H373 May cause damage to lung(inhalation) through prolonged or repeated exposure

H411 Toxic to aquatic life with long lasting effects

EUH208 Contains Thiophanate-methyl. May produce an allergic reaction.

EUH401 To avoid risks to human health and the environment, comply with the instructions for use

Precautionary statement

- P201 Obtain special instructions before use.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P260 Do not breathe dust.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local /national/international regulations.
- SP 1 Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).

2.3 Other hazards

This product does not meet the criteria for PBT and vPvB according to Regulation(EC)No.1907/2006, Annex X III.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance

Not applicable

3.2 Mixtures

CAS No.	EC No.	Index No.	%(wt)	Substance name	Classification according to Regulation (EC) No 1272/2008
23564-05-8	245-740-7	006-069- 00-3	70.0	Dimethyl 4,4'-(<i>o</i> -phenylene)bis (3-thioallophanate) (ISO Name: Thiophanate-methyl)	Acute Tox.4; H332 Skin Sens.1; H317 Muta.2; H341 Aquatic Acute 1; H400 Aquatic Chronic 1; H410
1344-28-1	215-691-6	_	≧1.0, <10	Aluminum oxide	STOT SE3; H335 STOT RE1; H372
14808-60-7	238-878-4	_	≧0.1	Quartz	Carc.1A; H350 STOT SE1; H370 STOT RE1; H372
—	—	—	Balance	Other ingredients	_

4. FIRST AID MEASURES

4.1 Description of first aid measures

- 4.1.1 Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- 4.1.2 Skin Contact: Wash with plenty of water and soap. If skin irritation or rash occurs: Get medical advice/attention.
- 4.1.3 Inhalation: Remove person to fresh air and keep at rest in a position comfortable for breathing. Call a

POISON CENTER/doctor if you feel unwell.

- 4.1.4 Ingestion: Rinse mouth. Call a POISON CENTER/doctor if you feel unwell.
- 4.2 Most important symptoms and effects, both acute and delayed

Not available.

4.3 Indication of any immediate medical attention and special treatment needed No specific antidote. Supportive care. Treatment based on judgment of physician in response to symptoms of patient.

5. FIRE - FIGHTING MEASURES

5.1 Extinguishing media : Dry chemicals, Carbon dioxide, Alcohol foam or water spray.

Unsuitable extinguishing media : Not known.

- 5.2 Special hazards arising from the substance or mixture Thermal decomposition or combustion may produce harmful and irritant gas/fume such as carbon dioxide, carbon monoxide, sulfur oxides and nitrogen oxides.
- 5.3 Advice for firefighters

Protective equipment : Wear self-contained breathing apparatus and complete personal protective equipment.

Other information : Move containers away from fire areas if it can be done without risk. If impossible to Remove containers from fire zone, cool them with water spray.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precaution, protective equipment and emergency procedures

Refer to Section 8 for personal protective equipment.

Avoid contact with skin, eyes and clothing. Avoid breathing dust.

6.2 Environmental precautions: Prevent from entering into drains, ditches or rivers because this product is toxic to

aquatic organisms.

- 6.3 Methods and material for containment and cleaning up Sweep up, place in a bag and hold for waste disposal. Wash spill site with soap and plenty of water after material pick-up is complete. Obey Federal, State or local regulations for health and environmental protection when discharging treated water to sea, river or lake etc.
- 6.4 Reference to other sections Section 8 and 13

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Refer to Section 8 for personal protective equipment.

Avoid breathing dust.

Avoid contact with skin, eyes and clothing.

Keep out of the reach of children.

Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Avoid release to environment.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. IF exposed or concerned: Get medical advice/attention.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed.

Store in a cool, dry, well-ventilated place. Store locked up.

Protect from direct contact with water or excessive moisture, acids or bases.

7.3 Specific end use

Fungicide for agriculture use

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters : Active ingredient : TLV/ACGIH(2012) Not listed.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Use general and/or local exhaust ventilation to control dust.

Provide safety showers and eyewashes.

8.2.2 Individual protection measures, such as personal protective equipment

- (a) Eye protection : Use safety goggles.
- (b) Skin protection : Wear suitable working wear, gloves and boots.
- Hand protection : Protective gloves against chemicals and micro-organisms.

Gloves material ; e.g. outside Vinyl chloride resin inside Cotton, rayon

(c) Respiratory protection: Wear suitable respirator for dust.

(d) Thermal hazards : None

8.2.3 Environmental exposure controls :

Use general and/or local exhaust ventilation to control dusts.

Provide safety showers and eyewashes.

Prevent from entering into drains, ditches or rivers.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Off-white fine powder.
Odor	Faint sulfur odor
рН	4.0 – 7.0 (20% suspension at 20°C)
Melting Point	Not applicable.
Boiling Point	Not applicable.
Flash Point	Not applicable.
Evaporation Rate (Butyl Acetate=1)	Not available.
Flammability	Not highly flammable.
Vapor Pressure	$<1.3 \times 10^{-5}$ Pa at 25°C (as active ingredient)
Vapor Density (air=1)	Not applicable.
Relative Density	$0.14 \sim 0.28 \text{ g/cm}^3$
Solubility in water	Negligible, but dispersible.
Fat solubility:	Not applicable.
Partition Coefficient n-Octanol/H ₂ O	log $P_{o/w} = 1.44$ (as active ingredient)

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Auto-Ignition temperature	Not available.	
Viscosity	Not applicable	e.
Explosive Properties	Not explosive.	<i>.</i>
Oxidising properties	Not oxidizing.	
9.2 Other information		
Dust explosion limit	225 g/m ³	
Surface Tension	Not available.	
Particle Size Distribution	Not available.	

10. STABILITY AND REACTIVITY

10.1 Reactivity

The specific test data of the reactivity hazards is not available. But this product is stable under normal storage

and handling conditions. Incompatible materials are referred to 10.5.

10.2 Chemical stability

Stable under normal storage and handling conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerization does not occur.

10.4 Conditions to avoid

High temperature.

10.5 Incompatible materials

Oxidizing agents, strong acids or bases.

10.6 Hazardous decomposition products

Thermal decomposition or combustion may produce toxic and irritant gas or fume such as carbon dioxide, carbon monoxide, sulfur oxides and nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

(a) acute toxicity

Oral Dermal Inhalation	LD ₅₀ (rat): LD ₅₀ (rat): LC ₅₀ (rat):	> 2000mg/kg (female) > 2000mg/kg (male, female) > 5.27mg/L(male, female)		
		1.7 mg/L/4hr (male), 1.9 mg/L/4hr (female) (as active ingredient)		
		(Classification of active ingredient was used: H332.)		
(b)skin corrosion/i	rritation			
Dermal (rabbit): No irritant.				
(c)serious eye damage/irritation				
Eyes (rabbit): No irritant.				
(d)respiratory or skin sensitization				
Dermal (guine	a pig): No ser	nsitization.		
Respiratory:	Not av	vailable.		
(e)germ cell mutagenicity (as active ingredient)				
Ames test:	ľ	Negative		

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Chromosomal aberration test	: Negative	
Rec-Assay:	Negative	
UDS test:	Negative	
Micronucleou test :	Positive	
(f)carcinogenicity (as active ing	gredient)	
Negative (rat)		
Negative (mouse)		
(g)reproductive toxicity (as acti	ve ingredient)	
3 generations reproductive te Tetratogenicity (as active ing	· · ·	
	Negative (rabbit)	
(h)STOT-single exposure:(i)STOT-repeated exposure:Chronic Toxicity	Not available	
NOAEL(rat) : 8.8mg/kg/d NOAEL(mouse) : 98.6 mg/kg	lay(male), 10.2 mg/kg/day(g/day(male), 28.7 mg/kg/day	
(j)aspiration hazard:	Not available	
(k)Others	Not available	
12. ECOLOGICAL INFORMA	TION	
12.1 Toxicity		
Acute Toxicity to Fish : Acute Toxicity to Daphnia:		
Acute Toxicity to Algae:	ErC ₅₀ (Algae)	9.3 mg/L (72hr)
 12.2 Persistence and degradabil Bio-degradation test : Not Degradation test: Good 12.3 Bioaccumulative potential Not available. 12.4 Mobility in soil 	good degradability. d degradability.	
Not available.		
12.5 Results of PBT and vPvB 12.6 Other adverse effects : No		
13. DISPOSAL CONSIDERAT	IONS	
13.1 Waste treatment methods		

1) Waste disposal according to 91/689/EEC in the corresponding versions (hazardous waste).

2) Consider classifications (Eupopean waste catalogue) 02 01 or 07 04.

3) Consult the appropriate local authorities about special requirement.

4) Dispose of contents/container in accordance with local /national/international regulations.

14. TRANSPORT INFORM	ATION		
14.1 IMDG			
UN No.	3077		
Class	9		
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S.		
	(Thiophanate-methyl mixture)		
Packing group	III		
Marine pollutant	Applicable		
14.2 RID/ ADR			
Name and description	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S.		
	(Thiophanate-methyl mixture)		
UN No.	3077		
Class	9		
Packing group	III		
Hazard Identification No. 90			
Environmentally hazardo	us Applicable		
14.3 ICAO/IATA-DGR			
UN No.	3077		
Class	9		
Proper shipping name	Environmentally hazardous substances, solid, n.o.s. (Thiophanate-methyl mixture)		
Packing group	III		
Environmentally hazardous Applicable			
14.4 Special precautions for	use		
None			
15. REGULATORY INFOR	MATION		
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture			
Water Hazard Class (G	ermany): WGK 2		
15.2 Chemical safety assessment Not available			
16. OTHER INFORMATIO	N		
16.1 Classification accordin	g to Regulation (EC) No 1272/2008		
16.2 Added ,deleted or revis	ed information		

16.2.1 This safety data sheet is prepered in accordance with Regulation (EC) No 1907/2006.

16.3 List of relevant hazard statements contained in Section 2 to 16 of this document (for information

only)

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- H317 May cause an allergic skin reaction.
- H332 Harmful if inhaled
- H335 May cause respiratory irritation.
- H341 Suspected of causing genetic defects.
- H350 May cause cancer.
- H370 Causes damage to organs
- H372 Causes damage to organs through prolonged or repeated exposure.

H373 May cause damage to lung(inhalation) through prolonged or repeated exposure

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects

EUH208 Contains Thiophanate-methyl. May produce an allergic reaction.

EUH401 To avoid risks to human health and the environment, comply with the instructions for use