



# RUBBER ACCELERATOR TMTD

## Safety Data Sheet

According to the United Nations GHS (Rev. 8, 2019)  
Issue date: 9/22/2021 Revision date: 9/22/2021 Version: 1.0

### SECTION 1: Identification

#### 1.1. GHS Product identifier

Product form : Substance  
Trade name : RUBBER ACCELERATOR TMTD  
Chemical Substance Name : Thiram  
CAS-No. : 137-26-8

#### 1.2. Other means of identification

No additional information available

#### 1.3. Recommended use of the chemical and restrictions on use

Recommended use : It is a super accelerator for natural, synthetic rubber and latex, and can be used as a vulcanizing agent. This product is also an excellent second accelerator for thiazole accelerators, and can be used in combination with other accelerators as an accelerator for continuous vulcanization of rubber compounds.

Restrictions on use : No information available

#### 1.4. Supplier's details

Huangyan Zhedong Rubber Auxiliary Imp & Exp Co., Ltd  
21th Floor, General Chamber of Commerce Building, Laodong Beilu, Huangyan, Taizhou, Zhejiang, China  
318020  
T 0576-84115265  
F 0576-84200737  
zd@zhedongauxiliary.com  
www.zhedongauxiliary.com

#### 1.5. Emergency phone number

Emergency number : +86-13750660009

### SECTION 2: Hazard identification

#### 2.1. Classification of the substance or mixture

##### Classification according to the United Nations GHS

Acute toxicity (oral), Category 4	H302
Acute toxicity (inhalation:dust,mist) Category 4	H332
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Skin sensitisation, Category 1	H317
Specific target organ toxicity — Repeated exposure, Category 2	H373
Hazardous to the aquatic environment — Acute Hazard, Category 1	H400
Hazardous to the aquatic environment — Chronic Hazard, Category 1	H410

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects : Harmful if swallowed. Harmful if inhaled. Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. May cause damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.

#### 2.2. GHS Label elements, including precautionary statements

##### Labelling according to the United Nations GHS

Hazard pictograms (GHS UN) :



# RUBBER ACCELERATOR TMTD

## Safety Data Sheet

According to the United Nations GHS (Rev. 8, 2019)

Signal word (GHS UN)	: Warning
Hazard statements (GHS UN)	: H302+H332 - Harmful if swallowed or if inhaled. H315 - Causes skin irritation. H319 - Causes serious eye irritation. H317 - May cause an allergic skin reaction. H373 - May cause damage to organs through prolonged or repeated exposure. H410 - Very toxic to aquatic life with long lasting effects.
Precautionary statements (GHS UN)	: P260 - Do not breathe dust/fume/gas/mist/vapours/spray. P264 - Wash 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. P273 - Avoid release to the environment. P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. P301+P312 - IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. P302+P352 - IF ON SKIN: Wash with plenty of water. 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. P312 - Call a POISON CENTER/doctor if you feel unwell. P314 - Get medical advice/attention if you feel unwell. P330 - Rinse mouth. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P391 - Collect spillage. P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.

### 2.3. Other hazards which do not result in classification

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name	Product identifier	%	Classification according to the United Nations GHS
Thiram	CAS-No.: 137-26-8	97	Acute Tox. 4 H302 Acute Tox. 4 H332 Skin Irrit. 2 H315 Eye Irrit. 2 H319 Skin Sens. 1 H317 STOT RE 2 H373 Aquatic Acute 1 H400 Aquatic Chronic 1 H410

Full text of H-statements: see section 16

### 3.2. Mixtures

Not applicable.

## SECTION 4: First-aid measures

### 4.1. Description of necessary first-aid measures

First-aid measures general	: Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.

# RUBBER ACCELERATOR TMTD

## Safety Data Sheet

According to the United Nations GHS (Rev. 8, 2019)

First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after 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.
First-aid measures after ingestion	: Rinse mouth. Call a poison center or a doctor if you feel unwell.

### 4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects	: Harmful if swallowed. Harmful if inhaled. Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. May cause damage to organs through prolonged or repeated exposure.
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### 4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: No additional information available.

### 5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire	: Toxic fumes may be released, such as: carbon oxides, nitrogen oxides, sulfur oxides.
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### 5.3. Special protective actions for fire-fighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
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## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures	: Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Ensure adequate ventilation. Evacuate personnel to safe areas.
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#### 6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
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### 6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

### 6.3. Methods and materials for containment and cleaning up

For containment	: Collect spillage.
Methods for cleaning up	: Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. Notify authorities if product enters sewers or public waters.
Other information	: Dispose of materials or solid residues at an authorized site.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling	: Do not breathe dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures	: Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

# RUBBER ACCELERATOR TMTD

## Safety Data Sheet

According to the United Nations GHS (Rev. 8, 2019)

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Thiram (137-26-8)

#### USA - ACGIH - Occupational Exposure Limits

ACGIH OEL TWA	0.05 mg/m <sup>3</sup> (inhalable fraction and vapor)
ACGIH chemical category	dermal sensitizer, Not Classifiable as a Human Carcinogen

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.  
Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection : Protective gloves  
Eye protection : Safety glasses  
Skin and body protection : Wear suitable protective clothing  
Respiratory protection : [In case of inadequate ventilation] wear respiratory protection.

### 8.4. Exposure limit values for the other components

No additional information available

## SECTION 9: Physical and chemical properties

### 9.1. Basic physical and chemical properties

Physical state : Solid  
Appearance : Powder or granular  
Colour : White, light gray  
Odour : Slight odour  
Odour threshold : Not available  
Melting point : 155 - 156 °C  
Freezing point : Not available  
Boiling point : 129 °C (26.6 hPa)  
Flammability (solid, gas) : Non flammable.  
Explosive limits : Not available  
Lower explosive limit (LEL) : Not available  
Upper explosive limit (UEL) : Not available  
Flash point : 150 °C  
Auto-ignition temperature : Not available  
Decomposition temperature : Not available  
pH : Not available  
pH solution : Not available  
Viscosity, kinematic (calculated value) (40 °C) : Not available  
Partition coefficient n-octanol/water (Log Kow) : 1.73 (20 °C)  
Vapour pressure : Not available  
Vapour pressure at 50 °C : Not available  
Density : 1.36 g/cm<sup>3</sup> (20 °C)  
Relative density : Not available  
Relative vapour density at 20 °C : Not available  
Solubility : ca. 17 mg/L (20 °C)  
Particle size : Not available  
Particle size distribution : Not available  
Particle shape : Not available

# RUBBER ACCELERATOR TMTD

## Safety Data Sheet

According to the United Nations GHS (Rev. 8, 2019)

Particle aspect ratio : Not available  
Particle specific surface area : Not available

### 9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

There is a risk of a dust explosion if the following conditions are met:

- The substance is given in very finely distributed form (powder, dust).
- The substance is whirled up in sufficient quantity in the air.
- An ignition source is present (flame, spark, electrostatic discharge, etc.)

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

Strong oxidizing agents.

### 10.6. Hazardous decomposition products

Nitrogen oxides, sulfur oxides.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Harmful if inhaled.

#### Thiram (137-26-8)

LD50 oral rat	560 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	3.09 - 6.32 mg/L/4 h

Skin corrosion/irritation : Causes skin irritation.  
Serious eye damage/irritation : Causes serious eye irritation.  
Respiratory or skin sensitisation : May cause an allergic skin reaction.  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified  
Reproductive toxicity : Not classified  
STOT-single exposure : Not classified  
STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.  
Aspiration hazard : Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

# RUBBER ACCELERATOR TMTD

## Safety Data Sheet

According to the United Nations GHS (Rev. 8, 2019)

Ecology - general	: Very toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	: Very toxic to aquatic life with long lasting effects.

Thiram (137-26-8)	
LC50 - Fish [1]	0.046 mg/L (Oncorhynchus mykiss)
LC50 - Fish [2]	0.13 mg/L/96 h (Lepomis macrochirus)
EC50 - Crustacea [1]	0.38 mg/L (Daphnia magna)
EC50 72h - Algae [1]	0.065 mg/L (Pseudokirchneriella subcapitata)
EC50 96h - Algae [1]	< 0.1 mg/L (Desmodesmus subspicatus)
NOEC (acute)	225 mg/kg/14 d (Eisenia foetida)
NOEC chronic fish	0.01 mg/L/96 h (Oncorhynchus mykiss)
NOEC chronic crustacea	0.14 mg/L/48 h (Daphnia magna)

### 12.2. Persistence and degradability

#### RUBBER ACCELERATOR TMTD

Persistence and degradability	No additional information available
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### 12.3. Bioaccumulative potential

#### Thiram (137-26-8)

Partition coefficient n-octanol/water (Log Kow)	1.73 (20 °C)
BCF - Fish [1]	91

### 12.4. Mobility in soil

#### RUBBER ACCELERATOR TMTD

Mobility in soil	No additional information available
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### 12.5. Other adverse effects

Ozone	: Not classified
Other adverse effects	: No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information




In accordance with UN RTDG / IMDG / IATA

UN RTDG	IMDG	IATA
<b>14.1. UN number</b>		
3077	3077	3077
<b>14.2. UN Proper Shipping Name</b>		
ENVIRONMENTALLY HAZARDOUS	ENVIRONMENTALLY HAZARDOUS	Environmentally hazardous substance, solid,

# RUBBER ACCELERATOR TMTD

## Safety Data Sheet

According to the United Nations GHS (Rev. 8, 2019)

UN RTDG	IMDG	IATA
SUBSTANCE, SOLID, N.O.S. (Thiram)	SUBSTANCE, SOLID, N.O.S. (Thiram)	n.o.s. (Thiram)
<b>14.3. Transport hazard class(es)</b>		
9	9	9
		
<b>14.4. Packing group</b>		
III	III	III
<b>14.5. Environmental hazards</b>		
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes
No supplementary information available		

### 14.6. Special precautions for user

#### UN RTDG

Special provisions (UN RTDG) : 274, 331, 335, 375  
Limited quantities (UN RTDG) : 5 kg  
Excepted quantities (UN RTDG) : E1  
Packing instruction (UN RTDG) : P002, IBC08, LP02  
Special packing provisions (UN RTDG) : PP12, B3  
Portable tank and bulk container special instructions (UN RTDG) : T1, BK2, BK3  
Portable tank and bulk container special provisions (UN RTDG) : TP33

#### IMDG

Special provisions (IMDG) : 274, 335, 966, 967, 969  
Limited quantities (IMDG) : 5 kg  
Excepted quantities (IMDG) : E1  
Packing instructions (IMDG) : LP02, P002  
Special packing provisions (IMDG) : PP12  
IBC packing instructions (IMDG) : IBC08  
IBC special provisions (IMDG) : B3  
Tank instructions (IMDG) : BK1, BK2, BK3, T1  
Tank special provisions (IMDG) : TP33  
EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE  
EmS-No. (Spillage) : S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS  
Stowage category (IMDG) : A

#### IATA

PCA Excepted quantities (IATA) : E1  
PCA Limited quantities (IATA) : Y956  
PCA limited quantity max net quantity (IATA) : 30kgG  
PCA packing instructions (IATA) : 956  
PCA max net quantity (IATA) : 400kg  
CAO packing instructions (IATA) : 956  
CAO max net quantity (IATA) : 400kg  
Special provisions (IATA) : A97, A158, A179, A197, A215  
ERG code (IATA) : 9L

# RUBBER ACCELERATOR TMTD

## Safety Data Sheet

According to the United Nations GHS (Rev. 8, 2019)

### 14.7. Transport in bulk according to IMO instruments

Not applicable.

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations specific for the product in question

No additional information available

## SECTION 16: Other information

Issue date : 22/09/2021

Revision date : 22/09/2021

Abbreviations and acronyms : ADR - Agreement concerning the International Carriage of Dangerous Goods by Road  
ATE - Acute Toxicity Estimate  
BOD - Biochemical oxygen demand (BOD)  
BCF - Bioconcentration factor  
BLV - Biological limit value  
CAS-No. - Chemical Abstract Service number  
COD - Chemical oxygen demand (COD)  
ED - Endocrine disrupting properties  
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
EC-No. - European Community number  
IOELV - Indicative Occupational Exposure Limit Value  
IARC - International Agency for Research on Cancer  
IATA - International Air Transport Association  
IMDG - International Maritime Dangerous Goods  
LOAEL - Lowest Observed Adverse Effect Level  
TLM - Median Tolerance Limit  
EC50 - Median effective concentration  
LC50 - Median lethal concentration  
LD50 - Median lethal dose  
NOAEC - No-Observed Adverse Effect Concentration  
NOAEL - No-Observed Adverse Effect Level  
NOEC - No-Observed Effect Concentration  
N.O.S. - Not Otherwise Specified  
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail  
OECD - Organisation for Economic Co-operation and Development  
OEL - Occupational Exposure Limit  
SDS - Safety Data Sheet  
STP - Sewage treatment plant  
TRGS - Technical Rules for Hazardous Substances  
ThOD - Theoretical oxygen demand (ThOD)  
VOC - Volatile Organic Compounds

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

### Full text of H-statements:

H302	Harmful if swallowed
H332	Harmful if inhaled
H315	Causes skin irritation
H319	Causes serious eye irritation
H317	May cause an allergic skin reaction
H373	May cause damage to organs through prolonged or repeated exposure

# RUBBER ACCELERATOR TMTD

## Safety Data Sheet

According to the United Nations GHS (Rev. 8, 2019)

### Full text of H-statements:

H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Safety Data Sheet (SDS), UN

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

ZHEEDONG