

MATERIAL SAFETY DATA SHEET

: According to EC-directive 2001/58/EC

Rubber Accelerator TMTM(TS)

HS Code:29309090.90

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product label name	Tetramethyl Thiuram Monosulfide
Supplier	Qingdao YLSCH Industry&Trade Co.,Ltd Room 501,2-3 Unit. No.8,Zhengzhou Road, Qingdao,China. TEL: +86 18661665800
Emergency telephone	TEL: +86 18661665800
Intended use	Rubber Vulcanization Accelerator

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	一硫化四甲基秋兰姆 Tetramethyl Thiuram Monosulfide
CAS NO.	97-74-5
Chemical description	Yellow powder
TSCA NO.	none
EINECS NO.	none
Other information	$C_6H_{12}N_2S_3$

3. HAZARDS IDENTIFICATION

Repeated contact may cause skin sensitization. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

Symptoms and effects	Dust may be irritating to the respiratory tract and cause symptoms of bronchitis. Repeated contact may cause skin sensitization.
First aid	
General	In all cases of doubt, or when symptoms persist, seek medical attention.

Inhalation	Move to fresh air. If symptoms persist, seek medical advice.
Skin	Remove all contaminated clothing immediately. Wash off with plenty of soap and water. Seek medical advice if irritation develops. Launder clothes before reuse.
Eye	Rinse thoroughly with plenty of water. Eyelids should be held away from the eyeball to Ensure thorough rinsing. Seek medical advice if irritation develops.
Ingestion	Rinse mouth, give water to drink.
Advice to physician	No specific recommendations.

5. FIRE-FIGHTING MEASURES

Extinguishing media	Waterspray, water mist, foam, dry chemical powder, CO ₂
Unsuitable extinguishing media	None known
Special exposure hazards	Emits toxic fumes under fire conditions.
Hazardous decomposition/combustion products	Carbon monoxide(CO), sulfur oxides (SO _x), nitrous gases (NO _x).
Protective equipment	Wear self contained breathing apparatus.
Other information	Do not allow run-off from fire fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	For personal protection see Section 8. Avoid dust generation.
Environmental precautions	Avoid discharge into the environment. Collect as much as possible in a clean container for
Methods for cleaning up	(preferable) reuse or disposal.

7. HANDLING AND STORAGE

Handling	Avoid contact with skin. Avoid dust generation. The usual precautions for handling chemicals should be observed. Dust generated during handling. Storage can form explosive mixtures in air.
Storage requirements	Store in a dry and cool place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls	Avoid dust generation. Ensure good ventilation and local exhaustion of the working area.
Exposure limits	
Name: Tetramethyl Thiuram Monosulfide	No exposure limit has been established.
Personal protection	
Respiratory	Avoid breathing dust. In case of insufficient ventilation, wear suitable respiratory equipment.
Hand	Wear suitable gloves.
Eye	Wear safety goggles.
Skin and body	Wear suitable protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Yellow powder	Colour	Yellow
Odour	----	Boiling point	----
Melting point ≥	104℃	Flash point	> 150℃
Flammability	----	Explosion limits	----
Explosive properties		Auto ignition temperature	> 200℃
Oxidizing properties	----	Vapour pressure	----
Density	1.37-1.40g/cm ³ (25℃)	Bulk density	----
Solubility in water	Insoluble in water	Solubility in other solvents	Soluble in CS ₂ ,benzene
pH value	----	Partition coefficient	----
Residues (150um)% Max	0.1(Max)	Relative vapour density	----
Viscosity	----	Assay content % ≥	95
Strength of grain(N)	----	Zinc content %	----
Soluble Zinc content ≤	----	Oil content %	1.0-2.0

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage and handling conditions (see section 7).
Conditions to avoid	Heating > 100 °C: May catch fire.
Materials to avoid	No specific recommendations.
Hazardous decomposition products	Thermal decomposition products: carbon monoxide (CO), nitrous gases (NO _x), Sulfur oxides (SO _x).

11. TOXICOLOGICAL INFORMATION



Name	Tetramethyl Thiuram Monosulfide
Acute toxicity	
Oral LD50	rat : 730-1390mg/kg
Dermal LD50	rabbit : >2000 mg/kg
Irritation	
Skin	Slightly irritating to skin but not sufficient for classification.
Eye	Slightly irritating to eyes but not sufficient for classification.

12. ECOLOGICAL INFORMATION

Name	Tetramethyl Thiuram Monosulfide
Ecotoxicity	
	96h-LC50 (Oncorhynchus mykiss): 2.3mg/l.
Fish	96h-LC50 (Lepomis macrochirus): 2.6 mg/l.
Daphnia	48h-EC50 (Daphnia magna): 1.6 mg/l.
Degradation Biotic	Not readily biodegradable.

13. DISPOSAL CONSIDERATIONS

Product	Avoid discharge into the environment Small quantities: According to local regulations. Large quantities: Consult YLSCH Chemical for special advice.
Contaminated packaging	According to local regulations. Waste code number: Please refer to your specific industry
Other information	in the European Waste Catalogue.

14. TRANSPORT INFORMATION

Land transport (ADR/ RID)

ADR class	9	RID class	9
ADR/RID packing group	----	Hazard Identification No.	90
Substance Identification No.	3077	UN number	3077

Environmentally hazardous substance, solid, n.o.s.

Proper Shipping Name (Tetramethyl Thiuram Monosulfide)

**Sea transport (IMDG-code/ IMO)****Correct technical name****IMDG Class****UN Number****Packaging group****EMS Number****Air transport (ICAO-TI/ IATA-DGR)****ICAO-TI/IATA-DGR Class**

9

UN number

3077

Packing group

Environmentally hazardous substance, solid, n.o.s.

Correct technical name

(Tetramethyl Thiuram Monosulfide)

15. REGULATORY INFORMATION**Chemical description**

Tetramethyl Thiuram Monosulfide

Labelling according to EC directives**EC-number**

See section 2

Classification based on

Annex-1 to directive 67/548/EEC

R(isk) phrase(s)

R43 May cause sensitization by skin contact

R 50/53 Very toxic to aquatic organisms, May cause long-term adverse effects in the aquatic environment.

S 24 Avoid contact with skin

S 37 Wear suitable gloves

S 60 This material and its container must be disposed of as hazardous waste

S(afety) phrase(s)

S 61 Avoid release to the environment. Refer to special instruction /Safety data sheets

Other information

To be displayed on the label: "EC label".

Wassergefährdungsklasse (WGK)

2 (VwVwS Anhang 3)

16. OTHER INFORMATION

This information only concerns the above mentioned product and does not need to be valid if used with other product(s) or in any process. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user's own responsibility to make sure that the information is appropriate and complete for his special use of this product.