

Safety Data Sheet

According to Regulation (EC) No 1907/2006

Tetramethylthiuram monosulphide

Version 1.0

Printing date: 29/11/2013

Revision date: 29/11/2013

SDS Record Number: CSSS-TCO-010-113742

Section 1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:

Identification on the label/Trade name: Tetramethylthiuram monosulphide

Additional identification: TMTM

Identification of the product: CAS# 97-74-5; EC# 202-605-7

Index Number: 006-080-00-3

REACH registration No.: Not available

1.2 Relevant identified uses of the substance and uses advised against:

1.2.1 Identified uses:

Rubber accelerator.

1.2.2 Uses advised against:

Not available.

1.3 Details of the supplier of the safety data sheet:

Supplier(Only representative): -

Supplier(Manufacturer): HEBI UHOO RUBBER CHEMICALS CO.,LTD.

Address: East Section of Liyang Road,Qibin Developing Zone,Hebi,Henan,China

Contact person(E-mail): Kevin Guo

Telephone: +86-392-337 0929

Fax: +86-392-337 0959

1.4 Emergency telephone Number:

+86-392-337 0929 Only available during office hours (8:30a.m.-17:30p.m. Beijing Time Zone)

Available outside office hours? YES ☐ NO ☒

Section 2 Hazards Identification

2.1 Classification of the substance/mixture:

2.1.1 Classification:

The substance is classified as following according to 67/548/EEC and REGULATION (EC) No 1272/2008:

REGULATION (EC) No 1272/2008	
Hazard classes/Hazard categorie	Hazard statement
Acute Tox. 4	H302
Skin Sens. 1	H317
Aquatic Chronic 2	H411

For full text of H- phrases: see section 2.2.

67/548/EEC	
Hazards characteristics	R-Phrases
Xn	R22
-	R43

For full text of R- phrases: see section 16.

2.2 label elements:

Hazard Pictograms:



Signal Word(S):

Warning

Hazard Statement:

H302: Harmful if swallowed.

H317: May cause an allergic skin reaction.

H411: Toxic to aquatic life with long lasting effects.

Precautionary statement:

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

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

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P330: Rinse mouth.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

P363: Wash contaminated clothing before reuse.

P391: Collect spillage.

P501: Dispose of contents/container in according with local regulation.

2.3 Other hazards:

Fine dust clouds may form explosive mixtures with air. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

Section 3 Composition/information on ingredients

Substance/Mixture:

Substance

Ingredient(s):

Chemical Name	Registration No.	CAS No.	EC No.	Concentration
Tetramethylthiuram monosulphide	N/A	97-74-5	202-605-7	97%

Section 4 First aid measures

4.1 Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

4.1.1 In case of inhalation:

Move to fresh air. Oxygen or artificial respiration if needed. Consult a physician

4.1.2 In case of skin contact:

Wash immediately with soap and water.

4.1.3 In case of eyes contact:

Wash well open eyes immediately, abundantly and thoroughly with water. Consult an ophthalmologist immediately.

4.1.4 In case of ingestion:

Do not induce vomiting. Seek medical advice.

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

Harmful if swallowed. May cause an allergic skin reaction.

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

If skin irritation or rash occurs, get medical advice/attention.

Section 5 Fire-Fighting measures

5.1 Extinguishing media:

Suitable extinguishing media: Water spray, foam, dry powder.

Unsuitable extinguishing media: All other extinguishants.

5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released: Nitrogen oxides, carbon dioxide, sulfur oxides.

5.3 Special fire fighting methods and special protective actions for fire-fighters:

Wear self contained breathing apparatus for fire fighting if necessary.

Section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel: Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.1.2 For emergency responders: Wear an appropriate NIOSH/MSHA approved respirator if dust is generated.

6.2 Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods for Containment and Cleaning up:

Shovel or sweep up. Recover the product and place in a dry labelled container. Destroy the product by incineration (in accordance with local and national regulations).

6.4 Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

6.5 Additional information:

Not applicable.

Section 7 Handling and storage

7.1 Precautions for safe handling:

7.1.1 Protective measures: Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

7.1.2 Advice on general occupational hygiene: Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities:

Keep in a well-ventilation place. Keep in a dry place. Store protected from moisture. Incompatible products: Oxidants, strong acids.

7.3 Specific end use(s):

Packaging materials: Recommended paper bags, big bag.
Not applicable.

Section 8 Exposure Controls/Personal Protection

8.1 Control parameters:

8.1.1 Occupational exposure limits: Not available.

8.1.2 Additional exposure limits under the conditions of use: Not available.

8.1.3 DNEL/DNEL and PNEC-Values: Not available.

8.2 Exposure controls:

8.2.1 Appropriate engineering controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.2.2 Individual protection measures, such as personal protective equipment:

Eye/face protection: Safety glasses.

Hand protection: Material: Nitrile rubber.

Minimum layer thickness: 0,11 mm.

Break through time: > 480 min.

Body protection: Protective clothing. Protective boots, if the situation requires.

Respiratory protection: Wear effective dust mask.

Thermal hazards: Wear suitable protective clothing to prevent heat.

8.2.3 Environmental exposure controls: Avoid discharge into the environment.
According to local regulations, Federal and official regulations.

Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance:	Powder, solid
Colour:	Yellow
Odour:	Slight
Odour threshold:	Not available
pH:	Not available
Melting point/range (°C):	ca. 108.06°C
Boiling point/range (°C):	ca. 243°C(Decomp.)
Flash point (°C):	Closed cup: >150°C [Pensky-Martens.]
Evaporation rate:	Not available
Flammability limit - lower (%):	Not available
Flammability (solid, gas):	Not available
Ignition temperature (°C):	Not available
Upper/lower flammability/explosive limits:	Not available
Vapour pressure (20°C):	Not available
Vapour density:	Not available
Relative Density:	1.4
Bulk density (kg/m ³):	Not available
Water solubility (g/l):	308 mg/L(20°C)(pH: 7.58-7.66)
n-Octanol/Water (log Po/w):	0.75

Auto-ignition temperature:	>200°C
Decomposition temperature:	>243°C
Viscosity, dynamic (mPa.s):	Not available
Explosive properties:	Not explosive
Oxidising properties:	Not oxidising
Molecular Formula:	C ₆ H ₁₂ N ₂ S ₃
Molecular Weight:	208.37

9.2. Other information:

Fat solubility(solvent– oil to be specified)	Not available
etc:	
Surface tension:	70.2 mN/m(21.3°C)(900 mg/L)
Dissociation constant in water(pKa):	Not available
Oxidation-reduction Potential:	Not available
Specific gravity:	Not available

Section 10 Stability and reactivity

10.1 Reactivity:	The substance is stable under normal storage and handling conditions.
10.2 Chemical stability:	Stable at room temperature in closed containers under normal storage and handling conditions.
10.3 Possibility of hazardous reactions:	No dangerous reactions known.
10.4 Conditions to avoid:	Incompatible materials. Store protected from moisture and heat.
10.5 Incompatible materials:	Oxidants, strong acids.
10.6 Hazardous decomposition products:	Nitrogen oxides, carbon dioxide, sulfur oxides.

Section 11 Toxicological information

11.1 Toxicokinetics, metabolism and distribution:	
Non-human toxikological data:	Not available
11.2 Information on toxicological effects:	
Acute toxicity:	
LD50(Oral, Rat):	690 mg/kg bw
LD50(Dermal, Rabbit):	>2000 mg/kg bw
LC50(Inhalation, Rat):	Not available
Skin corrosion/Irritation:	Not classified
Serious eye damage/irritation:	Not classified
Respiratory or skin sensitization:	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:	Not classified

Section 12 Ecological information

Toxicity:

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LC50	5.3 mg/L	96h	Poecilia reticulata	OECD 203	N/A	N/A
LC50	2.9 mg/L	48h	Daphnia	OECD 202	N/A	N/A
EC50	1 mg/L	96h	Algae	OECD 201	N/A	N/A

Persistence and degradability: Not available.

Bioaccumulative potential: Not available.

Mobility in soil: Not available.

Results of PBT&vPvB assessment: Not available.

Other adverse effects: Not available.

Section 13 Disposal considerations

13.1 Waste treatment methods: The material should be disposed of by incineration in a chemical incinerator in compliance with national and regional requirements.

13.2 Product / Packaging disposal: If empty container retains product residues, all label precautions must be observed. Return for reuse or dispose according to national or local regulations.

Section 14 Transport information

	Land transport(ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number	3077	3077	3077
UN Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (TETRAMETHYLTHIURAM MONOSULFIDE)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (TETRAMETHYLTHIURAM MONOSULFIDE)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (TETRAMETHYLTHIURAM MONOSULFIDE)
Transport hazard Class	9	9	9
Packaging group	III	III	III
Environmental hazards	Yes	Yes	Yes
Special precautions for user	See section 2.2	See section 2.2	See section 2.2
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	IBC08	IBC08	IBC08

Section 15 Regulation information

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

Relevant information regarding authorization: Not applicable.

Relevant information regarding restriction: Not applicable.

Other EU regulations: Employment restrictions concerning young person must be observed. For use only by technically qualified individuals.

Other National regulations: Not applicable

Chemical Safety Assessment has been carried out? YES ☐ NO ☒

Section 16 Other information

16.1 Indication of changes:

Version 1.0 Amended by EU No 453/2010

16.2 Relevant R- phrases (number and full text):

R22 Harmful if swallowed.

R43 May cause sensitisation by skin contact.

R51-53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

16.3 Training instructions:

Not applicable.

16.4 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

16.5 Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Author: Hangzhou CIRS Co., Limited **Website:** www.cirs-group.com **Tel:** 0571-87206555 **Email:** info@cirs-group.com