

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT CODE H0079

PRODUCT NAME 4-METHYL-5-VINYLTHIAZOLE

SUPPLIER Shanghai M & U International Trade Co., Ltd.

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FOR EMERGENCIES CALL CHEMTREC: 800-424-9300 (24-HOURS)

2. HAZARD IDENTIFICATION:

Classification of the substance or mixture



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation. STOT SE 3 H335 May cause respiratory irritation.

Flam. Liq. 4 H227 Combustible liquid.

Label elements

Harmful in contact with skin or if inhaled.

GHS label elements

Pictograms on label shall be in the shape of a square set at a point and shall include a black hazard symbol on a white background with a red frame sufficiently wide to be clearly visible. The substance is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



GHS07

Signal word

Warning

Hazard statements

H227	Combustible liquid.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P270 Do not eat, drink or smoke while using this product.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see on this label).

P403+P233 Store in well ventilated place. Keep contained tightly closed.

P403+P235 Store in well ventilated place. Keep cool.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:

NFPA ratings (scale 0 - 4)

Health = 2 Fire = 2 Reactivity = 0

HMIS-ratings (scale 0 - 4)

 $\begin{aligned} & \text{Health} = 2 \\ & \text{Fire} = 2 \\ & \text{Reactivity} = 0 \end{aligned}$

Other hazards

Results of PBT and vPvB assessment

PBT:

Not applicable.

vPvB:

Not applicable.

3. COMPOSITION AND INFORMATION ON INGREDIENTS:

Chemical characterization: Substances

CAS No.: 13327-56-5

Description: 4-METHYL-5-VINYLTHIAZOLE

Identification number(s)

EC- No.: 217-160-4

Hazardous components:

Component	Classification	Concentration
4-Methyl-5-vinylthiazole		
<i>2</i> 0	Flam. Liq. 4; acute toxin 4;	<=100%
A.	Skin irrit. 2; eye irrit. 2A;	
P	STOT SE 3; H227, H302,	The state of the s
1	H315, H319, H335	Blan.

4. FIRST-AID GUIDE:

Description of first aid measures

After inhalation:

In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

Do NOT induce vomiting. Never give anything by mouth to unconscious person. Rinse mouth with water. Consult a physician.

Information for doctor:

Most important symptoms and effects, both acute and delayed

No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5. FIRE-FIGHTING GUIDE:

Extinguishing media

Suitable extinguishing agents:

CO2 or extinguishing powder. Fight larger fires with alcohol resistant foam.

Special hazards arising from the substance or mixture

No further relevant information available.

Advice for firefighters

Protective equipment:

No special measures required.

Additional information

Cool endangered receptacles with water spray.

Collect contaminated firefighting water separately. It must not enter the sewage system.

6. ACCIDENTAL RELEASE GUIDE:

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing in vapors, use adequate ventilation. Remove all sources of ignition.

Environmental precautions:

Do not let product enter drains.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.

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 disposal information.

7. HANDLING AND STORAGE:

Handling:

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Ensure good ventilation/exhaustion at the workplace. Store under inert gas.

Information about protection against explosions and fires:

No special measures required.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:

Keep container tightly closed in dry and well-ventilated place. Containers which are opened must be carefully released and kept upright to prevent leakage. Store under inert gas.

Information about storage in one common storage facility:

Not required.

Further information about storage conditions:

Keep receptacle tightly sealed.

Specific end use(s)

No further relevant information available.

8. EXPOSURE AND PERSONAL PROTECTION:

Additional information about design of technical systems:

No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:

Not required.

Additional information:

The lists that were valid during the creation were used as a basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material should be based on consideration of the penetration times, rates of diffusion and the degradation.

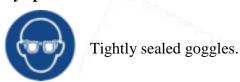
Material of gloves

Nitrile rubber, full contact and splash contact.

Penetration time of glove material

The exact break through time has to be determined by the manufacturer of the protective gloves and has to be observed.

Eye protection:



9. PHYSICAL AND CHEMICAL PROPERTIES:

Information on basic physical and chemical properties

Information on basic physical and chemical pro	operties
General Information	
Appearance:	
Form:	Liquid
Color:	Dark yellow
Odor:	Not determined.
Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/Melting range:	-15°C (5°F)
Boiling point/Boiling range: (33 hPa/25	78-80 °C (172-176°F)
mmHg)	
Flash point:	71 °C (160 °F)
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	
Decomposition temperature:	Not determined.
Auto igniting:	Not determined.
Danger of explosion:	Not determined.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure:	Not determined.
Density at 25 °C (77 °F):	1.093 g/cm³ (8.637 lbs/gal)
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Organic solvents:	0.0 %
Other information	No further relevant information available.

10. STABILITY AND REACTIVITY:

Reactivity

Chemical stability

Thermal decomposition/conditions to be avoided:

No decomposition if used according to specifications.

Possibility of hazardous reactions

No dangerous reactions known.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials:

Strong oxidizing agents.

Hazardous decomposition products:

Hazardous decomposition products formed under fire conditions, - Carbon oxides, Nitrogen oxides (NOx).

11. TOXICOLOGICAL INFORMATION:

Information on toxicological effects

Acute toxicity:

Primary irritant effect:

On the skin:

Irritant to skin and mucous membranes.

On the eye:

Irritating effect.

Sensitization:

No sensitizing effects known.

Additional toxicological information:

Carcinogenic categories

IARC (International Agency for Research on Cancer)

Substance is not listed.

NTP (National Toxicology Program)

Substance is not listed.

OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

12. ECOLOGICAL INFORMATION:

Toxicity

Aquatic toxicity:

No further relevant information available.

Persistence and degradability

No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential

No further relevant information available.

Mobility in soil

No further relevant information available.

Additional ecological information:

General notes:

Generally not hazardous for water.

Results of PBT and vPvB assessment

PBT:

Not applicable.

vPvB:

Not applicable.

Other adverse effects

No further relevant information available.

13. DISPOSAL RECOMMENDATIONS:

Waste treatment methods

Recommendation:

Combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packaging:

Recommendation:

Disposal must be made according to official regulations.

14. TRANSPORTATION INFORMATION:

UN-Number	
DOT, ADR, IMDG, IATA	UN1993
UN proper shipping name DOT	Combustible liquid, n.o.s. (4-Methyl-5-vinylthiazole)
ADR	

IMDG, IATA	
,	
Transport hazard class(es)	
DOT, ADR, IMDG, IATA	
Class	3 Flammable liquids
Packing group	Ro.
DOT, ADR, IMDG, IATA	III
Environmental hazards:	
Marine pollutant:	No
Special precautions for user	Tana
Transport in bulk according to Annex	
II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	Not applicable.
DOT	
Quantity limitations	
ADR	Not applicable.
Excepted quantities (EQ)	
IMDG	Not applicable.
Limited quantities (LQ)	
Excepted quantities (EQ)	
UN "Model Regulation":	UN1993, combustible liquids, n.o.s.
A	

15. REGULATORY INFORMATION:

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

Sara

Section 355 (extremely hazardous substances):

Substance is not listed.

Section 313 (Specific toxic chemical listings):

Substance is not listed.

TSCA (Toxic Substances Control Act):

Substance is not listed.

Proposition 65

Chemicals known to cause cancer:

Substance is not listed.

WARNING! This product contains a chemical known to the State of California to cause cancer: Acetaldehyde CAS-no. 75-07-0

Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

Chemicals known to cause developmental toxicity:

Substance is not listed.

Carcinogenic categories

EPA (Environmental Protection Agency)

Substance is not listed.

TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

GHS label elements

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P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see on this label).

P405 Store locked up.

P501

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

Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION:

The information in this SDS was obtained from current and reliable sources. However, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond M&U's control, it is the responsibility of the user both to determine safe conditions for use of this product and to assume liability for loss, damage, or expense arising out of the products improper use. No warranty expressed or implied regarding the product described herein will be created by or inferred from any statement or omission in the SDS. Various federal, state, or provincial agencies may have specific regulations concerning the transportation, handling, storage, use, or disposal of this product which may not be reflected in the SDS. The user should review these regulations to ensure full compliance.

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