Zinc methyl mercaptobenzimidazole (cas 61617-00-3) MSDS

Material Safety Data Sheet

Section I. Chemical Product and Company Identification

VANOX ZMTI
Trade Name
61617-00-3
CAS#

zinc 2-mercaptotoluimidazole and petroleum process oil
Synonym

2H-Benzimidazole-2-thione,1,3-dihydro-4(or 5)-methyl-zinc salt
Chemical Name

Not available.
Chemical Family

C8H8N2S.1/2Zn
Chemical Formula

Material Uses Industrial applications: Elastomer antioxidant.

Section II. Composition and Information on Ingredients

Name	CAS #	% by Weight
zinc 2-mercaptotoluimidazole	61617-00-3	96
petroleum process oil, <3.0% DMSO extractable materia	64742-52-5	4

Section III. Hazards Identification

Off white to tan powder. May cause allergic skin reaction. May cause eye irritation. Dust suspended in air

in
Emergency Overview
critical proportions and in the presence of an ignition source may present an explosion hazard.

Section IV. First Aid Measures
Flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.
Eye Contact

Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly
Skin Contact
careful to clean folds, crevices, creases and groin. If irritation persists, seek medical attention.

Allow the victim to rest in a well-ventilated area. Seek medical attention
Inhalation

Do not induce vomiting. Immediately give two glasses of water, a little at a time. Never give anything by
Ingestion
mouth to an unconscious person. Call a physician. If vomiting occurs spontaneously, lower head below waist
to prevent fluid from entering the lungs.

Continued on Next
Section V. Fire and Explosion Data
Non-flammable.
Flammability of the Product

Not available.
Auto-Ignition Temperature

Not available.
Flash Points

Not available.
Flammable Limits

carbon oxides (CO, CO2) nitrogen oxides (NO, NO2...) sulfur oxides (SO2, SO3...)
Products of Combustion

Explosion Hazards in Presence Dust suspended in air in critical proportions and in the presence of an ignition source presents an explosion
hazard.
of Various Substances
SMALL FIRE: Use DRY chemical powder.
Fire Fighting Media
LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
and Instructions

Not available.
Special Remarks on
Fire Hazards
Special Remarks on Explosion As with any dry material, pouring or allowing to free-fall or to be conveyed through chutes or pipes can
Hazards accumulate and generate electrostatic sparks, potentially causing ignition of the material itself, or of any
flammable materials which may come in contact with the material or its container.

Section VI. Accidental Release Measures
Use appropriate tools to put the spilled solid in a convenient waste disposal container.
Small Spill

Warn personnel to move away. Avoid creating dust. Use appropriate instruments to put the spilled material
Large Spill
in a waste disposal. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and state regulations.

Section VII. Handling and Storage
Keep container tightly closed in a cool, well-ventilated place. Ground all equipment containing material.
Keep
Storage
away from sources of ignition.
After handling, always wash hands thoroughly with soap and water. Ground all equipment containing
Handling Procedures and
material.

Equipment

Section VIII. Exposure Controls/Personal Protection
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below
Engineering Controls
recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent.
Personal Protection
Gloves.
petroleum process oil, <3.0% DMSO extractable material
TLV/PEL
TWA: 5 (mg/m3) from OSHA (PEL) [US]
TWA: 5 STEL: 10 (mg/m3) from ACGIH (TLV) [US]

Continued on Next
Section IX. Physical and Chemical Properties
Off-white to tan (with Powdered solid.
Appearance
pink tint)

Not applicable.
Molecular Weight

Not applicable.
pH (1% soln/water)

Not available.
Boiling/Condensation Point

Not available.
Melting/Sublimation Point

1.54 (Water = 1)
Specific Gravity

1.54 Mg/m3 @ 25

Density

Not available.
Vapor Pressure

Not available.
Vapor Density
Volatility Not available.
Odor / Odor Threshold None

Evaporation rate Not available.

Not available.
Viscosity

Not available.
Water/Oil Dist. Coeff.
Solubility 3.20 x 10-2 g/l of solution at 20.0??C.

Section X. Stability and Reactivity Data
The product is stable.
Stability

Not available.
Instability Temperature

Not available.
Conditions of Instability

Not available.
Incompatibility with
Various Substances
Not available.
Corrosivity

Special Remarks on Reactivity Not available.

Section XI. Toxicological Information

Eye contact. Inhalation. Ingestion.
Routes of Entry

Acute oral toxicity (LD50): 800 mg/kg [Rat].
Toxicity to Animals
Acute dermal toxicity (LD50): >2000 mg/kg [Rat]
Acute toxicity of the dust (LC50):> 2.12 mg/l 4 hour(s) [Rat]

Primary skin irritation index (rabbits): 0
Special Remarks on
Toxicity to Animals
Moderate skin sensitiser in guinea pig.

Acute Effects

Mildly irritating to the eyes.
Eye contact

This product is not expected to be a skin irritant.
Skin contact

May cause allergic skin reaction.
Sensitization

Continued on Next
Harmful if swallowed.
Ingestion

Dust may cause mechanical irritation.
Inhalation

Not available.
Remark

CARCINOGENIC EFFECTS Not available.
:
Chronic Effects on
MUTAGENIC EFFECTS Non-mutagenic - Ames Test
:
Humans
TERATOGENIC EFFECTS Not available.

:
DEVELOPMENTAL TOXICITY Not available.
:

Not available.
Remarks

Section XII. Ecological Information
Ecotoxicity in water: 6.6 mg/l [EC50], 72 hours [Algae]. 10 mg/l [EC50], 72 hours [Algae]. 1.4 mg/l [EC50],
Ecotoxicity
48 hours [Daphnia]. 5.6 mg/l [LC50], 96 hours [Rainbow trout].
Not available.
BOD5 and CO
Not available.
Products of Biodegradation

Attained 27% degradation after 28 days. Not considered to be readily biodegradable under the conditions of
Biodegradability
OECD guideline No. 301B.

Not available.
Special Remarks on the
Products of Biodegradation

Section XIII. Disposal Considerations
Waste must be disposed according to applicable regulations.
Waste information

Not available.
Waste stream

Section XIV. Transport Information
Not controlled under TDG (Canada).
TDG Road/Rail

Not applicable.

Not applicable.
Remarks

Not available.
Maritime
Transportation

Continued on Next
Section XV. Other Regulatory Information and Pictograms
Federal & Provincial
CEPA DSL: VANOX ZMTI
Regulations.

WHMIS Class D-2B: Material causing other toxic effects (TOXIC).
WHMIS (Canada)

Remark Not applicable.

Other regulatory lists TSCA inventory:

VANOX? ZMTI
EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.
Australia: VANOX ZMTI

Japan (MITI): VANOX ZMTI

Korea (TCCL): VANOX ZMTI

National Fire
2
Hazardous Material Health Hazard Flammability

1
Protection Association
Information System 1
Fire Hazard
2 0
(U.S.A.)
(U.S.A.) Reactivity
Health
0
Reactivity

E
Personal Protection Specific hazard

WHMIS (Canada)
(Pictograms)

Protective Clothing
(Pictograms)

Section XVI. Other Information
Not available.
References

Not available.
Other Special
Considerations

Validated by Erin A. Bendig on 8/12/2005. Verified by Erin A. Bendig.
Printed 8/12/2005.
Information Contact (203) 853-1400
Corporate Risk Management Department

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