

Preparation Date 04-Oct-2016

Revision Date 04-Oct-2016

Revision Number: 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**Product Identifier****Product Description** Microthiol (Sulphur) 80% WDG**Other means of Identification****UN-No** Not regulated**Recommended use of the chemical and restriction on use****Recommended use** Fungicide
Uses advised against Activities contrary to label activities**Details of the Supplier of the Safety Data Sheet****Supplier Address****UPL Limited**
Uniphos House, Madhu Park,
Khar (W), Mumbai, India
Tel: +91-(022)- 2646-8000**E-mail address** info.in@uniphos.com**Emergency Telephone Number****Company Phone Number** +91-(022)- 2646-8000
Emergency telephone number +91-(022)-2646-8000 (Office Hours 9:00 A.M. - 5:00 P.M.)**2. Hazard Identification****Classification**Acute toxicity - Oral Category 5 - (H303)
Acute toxicity - Dermal Category 5 - (H313)
Acute toxicity - Inhalation Category 5 - (H333)**Label elements****Symbol** None**Signal word** Danger**Hazard Statements****H303** - May be harmful if swallowed**H313** - May be harmful in contact with skin**H333** - May be harmful in inhaled**Precautionary Statements****Prevention**

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may form combustible dust concentrations in air.

3. Composition/information on Ingredients

Chemical name	CAS-No	Weight %	Trade secret
Sulphur	7704-34-9	80	-

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

4. First aid measures**First-aid measures**

Eye contact	Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Immediately call a poison control center or doctor for treatment advice.
Skin contact	Remove contaminated clothing and shoes immediately, then wash with plenty of water. Clean contaminated clothing and shoes before re-use or discard if they cannot be thoroughly cleaned. If skin irritation or rash develops, get medical attention.
Ingestion	Rinse mouth. Never give anything by mouth to an unconscious person. Do not induce vomiting unless told by physician. If vomiting occurs ensure patient can breathe. Get medical attention.
Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

Most Important Symptoms and Effects, Both Acute and Delayed**Most Important Symptoms and Effects** The most important known symptoms and effects are described in labeling see section (2) and/or in section 11**Indication of immediate medical attention and special treatment needed****Notes to physician** Treat symptomatically and supportively**5. Fire-fighting measures**

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Extinguishing media**Suitable extinguishing media** CO₂, Dry chemical. Water spray or fog.**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire**Special hazards arising from the substance or mixture****Special Hazard** may form combustible dust concentrations in air**Hazardous combustion products** Oxides of sulphur**Protective equipment and precautions for firefighters**

Wear self-contained breathing apparatus and protective suit. Use standard firefighting procedures and consider the hazards of involved material.

6. Accidental release measures**Personal precautions, protective equipment and emergency procedures****Personal Precautions** Avoid dust formation. Avoid breathing dust or mist. Avoid contact with skin, eyes. Remove all sources of ignition. Keep unnecessary and unprotected personnel from entering. Use personal protective equipment.**Environmental precautions** Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. See Section 12 for additional ecological information. Avoid release to the environment. Collect spillage.**Methods and material for containment and cleaning up****Methods for Clean-Up** Sweep up or vacuum up spillage and collect in suitable container for disposal. Remove all sources of ignition.**Reference to other sections** Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.**7. Handling and Storage****Precautions for safe handling****Handling** Avoid dust formation. Avoid breathing dust/mist. Keep out of reach of children. Do not eat, drink or smoke when using this product. Remove all sources of ignition. Provide appropriate exhaust ventilation at places where dust is formed. Wash thoroughly after handling.**Conditions for safe storage, including any incompatibilities****Storage** Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Keep out of reach of children.**incompatible materials** strong oxidizers, metals, strong acids**8. Exposure Controls/Personal Protection**

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Exposure Guideline

Apply technical measures to comply with the occupational exposure limit.

Engineering controls

Ensure adequate ventilation, especially in confined areas. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal protective equipment

Eye/Face Protection

Avoid contact with eyes. Where there is potential for eye contact have eye flushing equipment available. Tightly fitting safety goggles. Face-shield.

Skin/Hand protection

Wear protective gloves/clothing. Long-sleeved clothing

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Environmental exposure controls

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided. Local authorities should be advised if significant spillage cannot be contained.

General hygiene considerations

Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

appearance	Free flowing granular solid
Physical state	Solid
Odor	Earthy/woody, similar to sawdust.
Color	Slightly orangish tan
odor threshold	No information available

<u>Property</u>	<u>VALUES</u>	<u>Remarks/ Method</u>
pH	No information available	
Melting point/freezing point	No information available	
Boiling Point/Range	No information available	
Flash Point	168°C	
flammability (solid, gas)	No information available	
Upper/lower flammability or Explosive limit	No information available	
Relative density	0.87 g/ml	pour/tap density
Bulk density	No information available	
Vapor density	No information available	
Vapor pressure	No information available	
Water solubility	No information available	
Solubility in Other Solvents	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	241°C	
decomposition temperature	No information available	
Viscosity, kinematics	No information available	
Dynamic viscosity	No information available	
Oxidizing properties	No information available	
Explosive properties	No information available	

OTHER INFORMATION

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Softening point
VOC Content
density
Bulk densityNo information available
No information available
No information available
No information available

10. Stability and Reactivity

Reactivity

No information available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reaction

None under normal processing.

Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition.

Incompatible Materials

strong oxidizers, metals, strong acids

Hazardous decomposition products

Oxides of sulphur

11. Toxicological Information

Information on Toxicological Effects

Product information

Acute Oral LD50 >2200 mg/kg
Acute DermalLD50 >2000 mg/kg
Acute Inhalation LC50 >5.4 mg/l - 4hr

Local effect

Inhalation May be harmful if inhaled
Eye contact Not irritating
Skin contact Not irritating
Ingestion May be harmful if swallowed

Chronic toxicity

Skin Corrosion/Irritation Not irritating
Eye damage/irritation Not irritating
sensitization Based on available data, the classification criteria are not met.
Mutagenic effects Based on available data, the classification criteria are not met.
Carcinogenic effects Based on available data, the classification criteria are not met.

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Reproductive effects**STOT - Single Exposure****STOT - repeated exposure****Aspiration hazard**

Based on available data, the classification criteria are not met.

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12. Ecological Information**Ecotoxicity****LC50 Fish (96 hr) = >200 mg/l** Common Carp (Rainbow trout)**EC 50 Daphnia (48 hr) = >512 mg/l****EC 50 Algae (72 hr) = 290 mg/l****Persistence and Degradability**

No information available.

Bioaccumulative Potential

No information available.

Other Adverse Effects

No information available.

13. Disposal Considerations**Waste Treatment Methods****Waste Disposal Method**

Dispose of in accordance with applicable Federal, State, local laws and regulations.

Contaminated packaging

Discharge, treatment, or disposal may be subject to national, state, or local laws.

14. Transport Information**IMDG/IMO**

Not regulated

IATA/ICAO

Not regulated

15. Regulatory Information**International Inventories****Sulphur : (CAS 7704-34-9)**

TSCA	Complies
EINECS	Complies
ELINCS	Complies
DSL/NDSL	Complies
PICCS	Complies
ENCS	Complies
IECSC	-
AICS	Complies
KECL	Complies

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x :- Listed

- :- Not Listed, Not determined

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**ENCS** - Japan Existing and New Chemical Substances**IECSC** - China Inventory of Existing Chemical Substances**AICS** - Australian Inventory of Chemical Substances**KECL** - Korean Existing and Evaluated Chemical Substances**16. Other Information**

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End of Safety Data Sheet