

SDS

SAFETY DATA SHEET

Oakwood Products, Inc
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Estill, SC 29918
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Phone Numbers:

Product Information	803-739-8800
Transportation Emergency	800-451-8346
Outside the USA	760-602-8700

MATERIAL IDENTIFICATION

NAME: **Thiophenol**

CAS#: [108-98-5]

CAT#: 094667

For R&D use only.

HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids (Category 3)

Acute toxicity, oral (Category 1)

Acute toxicity, dermal (Category 1)

Skin corrosion/irritation (Category 2)

Serious eye damage/eye irritation (Category 2A)

Acute toxicity, inhalation (Category 1)

Respiratory tract irritation (Category 3)

Reproductive toxicity (Category 2)

Specific target organ toxicity, single exposure (Category 2)

Specific target organ toxicity, single exposure (Category 1)

Hazardous to the aquatic environment, long-term hazard (Category 1)

GHS Label elements, including precautionary statements

Pictograms



Signal Word

Danger

Hazard Statement(s)

H226	Flammable liquid and vapour
H300	Fatal if swallowed
H310	Fatal in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H330	Fatal if inhaled

H335	May cause respiratory irritation
H361	Suspected of damaging fertility or the unborn child
H371	May cause damage to organs
H372	Causes damage to organs through prolonged or repeated exposure
H410	Very toxic to aquatic life with long lasting effects

Precautionary Statement(s)

P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P262	Do not get in eyes, on skin, or on clothing.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Wear respiratory protection.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.
P304 + P340	IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P320	Specific treatment is urgent (see ... on this label).
P330	Rinse mouth.
P361	Remove/Take off immediately all contaminated clothing.
P363	Wash contaminated clothing before reuse.
P370 + P378	In case of fire: Use ... for extinction.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to.....

COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms	: Benzenethiol, Phenyl mercaptan
Formula	: C ₆ H ₅ SH
Molecular Weight	: 110.18 g/mol

CAS	Description	Concentration
108-98-5	Thiophenol	99%

FIRST AID MEASURES

In case of eye contact

Immediately flush eyes with running water for at least 15 minutes while keeping eyes open. Seek medical attention.

In case of skin contact

Wash thoroughly with soap and plenty of water. Seek medical attention.

If inhaled

Remove victim from source of exposure to fresh air. If breathing is difficult, administer oxygen. Seek medical attention.

If swallowed

Do not induce vomiting. Give water to victim to drink. Seek medical attention.

FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use carbon dioxide, dry chemical powder, alcohol-resistant or polymer foam.

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Unusual fire and explosion hazards/decomposition of product

emits toxic fumes under fire conditions.

ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid breathing fumes, vapors, mists or gas. Ventilate area. Remove all sources of ignition. Evacuate personnel.

Environmental precautions

Prevent further leakage if safe to do so.

Methods and materials for containment and clean up

Absorb spills on sand or vermiculite and place in closed container for disposal.

HANDLING AND STORAGE

Precautions for safe handling

Avoid prolonged use. Avoid all direct contact with material. Do not breathe dust or vapor. Wash thoroughly after handling.

Precautions for safe storage

Keep container tightly closed. Store in a cool, dry, well-ventilated area.

Air sensitive

Moisture sensitive.

EXPOSURE CONTROL/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Eye/face protection

Wear protective safety goggles or face shields tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Hand/skin protection

Avoid all direct contact with product.

Wear chemical-resistant gloves.

Wear protective clothing and boots.

After contact with skin, wash immediately.

Respiratory protection

Ensure adequate ventilation during use. Approved respiratory equipment must be used when airborne concentrations are unknown or exceed the exposure limits.

PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear colorless liquid
Odour	Stench
Odour Threshold	no data available
Melting point/Freezing Point	-15°C
Boiling Point	168-169°C
Flash Point	55°C-closed cup
Evaporation Rate	no data available
Flammability (solid, gas)	no data available
Upper/Lower Flammability or Explosive limits	no data available
Vapour pressure	no data available
Relative Density	1.075
Solubility(ies)	no data available
Partition coefficient: n-octanol/water	no data available
Auto-ignition temperature	no data available
Decomposition temperature	no data available
Viscosity	no data available
Refractive Index	1.59

STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

no data available

Conditions to avoid

Air.

Moisture.

Heat, flames and sparks. Extremes of temperature and direct sunlight.

Incompatible materials

Strong oxidizing agents, strong acids, and strong bases.

Hazardous decomposition products

May evolve carbon monoxide, carbon dioxide, and sulfur oxides.

TOXICOLOGICAL INFORMATION**Acute toxicity****Oral LD50**

Rat - 46.2 mg/kg

Remarks: Behavioral:Somnolence (general depressed activity). Behavioral:Coma. Respiratory disorder

Inhalation LC50

Rat - 4 h - 33 ppm

Remarks: Lungs, Thorax, or Respiration:Respiratory stimulation. Behavioral:Somnolence (general depressed activity).

Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Lacrimation.

Dermal LD50

Rabbit - 134 mg/kg

Remarks: Behavioral:Muscle weakness. Behavioral:Ataxia. Cyanosis

Skin corrosion/irritation

Causes skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

Reproductive toxicity - Rat - Oral

Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). Effects

on Fertility: Litter size (e.g.; # fetuses per litter; measured before birth). Effects on Embryo or Fetus:

Other effects to

embryo.

Reproductive toxicity - Rat - Oral

Maternal Effects: Other effects.

STOT-single exposure

Oral - The substance or mixture is classified as specific target organ toxicant, single exposure, category 2. - Nervous system

STOT-repeated exposure

Oral - The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 1. - Kidney

Aspiration hazard

no data available

Exposure Routes

Harmful to skin, eyes, and respiratory system.
May be toxic if inhaled or swallowed.

Signs and Symptoms of Exposure

Cough, Shortness of breath, Headache, Nausea, Vomiting

Additional Information

RTECS: DC0525000

To the best of our knowledge, the health hazards of this material have not been fully investigated.

ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish:

LC50 - *Oryzias latipes* (Japanese medaka) - 0.009 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates:

EC50 - *Daphnia magna* (Water flea) - 0.0044 mg/l - 48 h

Toxicity to algae:

EC50 - *Pseudokirchneriella subcapitata* (green algae) - 0.211 mg/l - 72 h

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

no data available

DISPOSAL CONSIDERATIONS

Dissolve in or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all Federal, State and local laws.

TRANSPORT INFORMATION

DOT

Phenyl mercaptan
6.1, 3
UN2337 I
Inhalation Zone B
Reportable Quantity (RQ): 100 lbs

IMDG

Phenyl mercaptan
6.1, 3
UN2337
Inhalation Zone B
EMS-No: F-E, S-D
Marine Pollutant: No

IATA

Phenyl mercaptan
6.1, 3
UN2337
Inhalation Zone B
IATA Passenger: Forbidden for transport
IATA Cargo: Forbidden for transport

REGULATORY INFORMATION

SARA 302 Components

SARA 302: The following chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302:

	CAS
Thiophenol	108-98-5

SARA 313 Components

SARA 313: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

New Jersey Right to Know Components

This product contains a chemical on the New Jersey Right to Know Components List.

	CAS
Thiophenol	108-98-5

California Prop. 65 Components

This product does not contain a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

OTHER INFORMATION

Version : 1.3

Revision Date : 7/30/2018

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Oakwood shall not be held liable for any damage resulting from handling or from contact with the above product.