

MATERIAL SAFETY DATA SHEET

According to EC Directive 1907/2006
Revision Date: 05.11.10 MS-50260 V02



A Meridian Life Science® Company

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Trade Name : TRIsure

Catalogue Number : BIO-38032 100ml
BIO-38033 200ml

Manufacturer/ Supplier: Bioline
16 The Edge Business Centre
Humber Road
London
NW2 6EW
Tel: +44 (0)20 8830 5300
Fax: +44 (0)20 8452 2822

Further Information Obtainable from: Technical Services
Details as above

24-Hour Contact in case of emergency : Vergiftungs-Informations-Zentrale
Mathilden Strasse 1
79106 Freiburg
GERMANY
Tel: +49 (0) 761 19240

2. COMPOSITION / INFORMATION ON INGREDIENTS

Mixture of hazardous substances listed below with non-hazardous additions.

CAS-No.	EC-No.	Concentration	Classification
Phenol			
108-95-2	203-632-7	30-60%	Muta. 2; Acute Tox. 3; STOT RE 2; Skin Corr. 1B; H373, H314, H301, H311, H331, H341 T, C, Mut.Cat.3, R23/24/25 - R34 - R48/20/21/22 - R68
Thiocyanate Compounds			
Proprietary	Proprietary	10-30%	Aquatic Chronic 3; Acute Tox. 4; H302, H312, H332, H412, EUH032 Xn, R20/21/22 - R32 - R52/53

3. HAZARD IDENTIFICATION

According to Regulation (EC) No1272/2008
Acute toxicity, Inhalation (Category 3)
Acute toxicity, Dermal (Category 3)
Acute toxicity, Oral (Category 3)
Skin corrosion (Category 1B)
Germ cell mutagenicity (Category 2)
Specific target organ toxicity - repeated exposure (Category 2)
Chronic aquatic toxicity (Category 3)

According to European Directive 67/548/EEC as amended.
Toxic by inhalation, in contact with skin and if swallowed. Causes burns. Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. Possible risk of irreversible effects. Contact with acids liberates very toxic gas. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Label elements

Pictogram



Signal word

Danger

Hazard statement(s)

H302

Harmful if swallowed.

H311

Toxic in contact with skin.

H314

Causes severe skin burns and eye damage.

H331

Toxic if inhaled.

H341

Suspected of causing genetic defects.

H373

May cause damage to organs through prolonged or repeated exposure.

H412

Harmful to aquatic life with long lasting effects.

EUH032

Contact with acids liberates very toxic gas.

Precautionary statement(s)

P261

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

P273

Avoid release to the environment.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

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.

Hazard symbol(s)

T/C

Toxic
Corrosive**R-phrases(s)**

R23/24/25

Toxic by inhalation, in contact with skin and if swallowed.

R34

Causes burns.

R68

Possible risk of irreversible effects.

R48/20/21/22

Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

R52/53

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases(s)

S26

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection.

S36/37/39

S45

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S61

Avoid release to the environment. Refer to special instructions/ Safety data sheets.

Other hazards

none

4. FIRST AID MEASURES

After Inhalation

Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Medical attention should be sought immediately.

After Swallowing

Corrosive. DO NOT INDUCE VOMITING. Drink one glass of water followed by milk if available, provided the person is conscious. Seek medical attention immediately, and give the medical care provider this MSDS.

After Contact with Eyes

Immediately flush eyes with copious amounts of water for at least 20 minutes, retracting eyelids often. Tilt the head to prevent chemical transferring to uncontaminated eye. Consult a doctor immediately.

After Contact with Skin

Remove phenol with undiluted Polyethylene Glycol 300 to 400 or isopropyl alcohol, if readily available, prior to washing. Wash exposed areas twice with large quantities of water. Consult a doctor immediately if irritation or pain persists after washing.

Note to Physician

Treat symptomatically.

Phenol: No known specific antidote. For eye or skin exposures repeatedly swab area with decontaminating agent(s): Polyethylene Glycol 300 (PEG 300).

In absence of specified decontaminating agent(s): Wash with copious amounts of soap and water. Areas of skin contact smaller than 10cm² may cause a minor health hazard although individual sensitivity may vary.

For systemic exposures: Systemic doses smaller than 1gm may cause a minor health hazard, although individual sensitivities may vary.

Give castor oil or another vegetable oil. If conscious, give charcoal slurry. Treat symptomatically. Maintain ion balanced hydration. Observe for 24 hours.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Carbon dioxide (CO₂) or dry chemical powder. Do **NOT** use water.

Unusual Fire Hazard

Emits toxic fumes when on fire.

Fire Fighting Protective Measures

Wear full protective clothing to prevent contact with the skin and eyes.

Wear self-contained breathing equipment to prevent inhalation of explosive or combustion gases. Fight fire from a safe distance and a protected location due to the potential of hazardous vapours and decomposition products.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Ensure ventilation is adequate. Wear rubber gloves.

Refer to section 8 for personal protection equipment recommendations.

Environmental Precautions

Do not allow to enter the surface or ground water. Do not allow to enter sewers.

Clean-up Measures

Prevent the spread of any spill in order to minimise harm to human health and the environment if it is safe to do so. Use a liquid-binding material (e.g. sand, sawdust, diatomite etc.) to absorb the spillage. Place in closed containers for disposal. Ventilate area well after clean-up procedures have taken place.

7. HANDLING AND STORAGE

Handling

Highly toxic and corrosive material. Avoid contact with skin and eyes, and avoid inhalation and ingestion of the material. Use only in a well ventilated area.

Storage

Store at +4°C.

Avoid exposure to light.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Measures

Local exhaust ventilation or other engineering controls are normally required when handling this product to avoid overexposure.

Ingredients with Limit Values

CAS NUMBER	CHEMICAL NAME	OEL
108-95-2	Phenol	5 PPM
Proprietary	Thiocyanate compounds	Not established

Personal Protection

Respiratory Protection: Approved air purifying respirator with dust/mist filter. Approved full face respirator as a minimum.

Eye Protection: An eye wash station must be available where this product is used. Wear chemically resistant, tightly fitting safety goggles or glasses with side-shields.

Skin Protection: Prevent all contact with this product. Protective gloves, apron, face and further skin protection should be used depending on conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment thoroughly after each use.

Hygiene Practices: Avoid contact with skin or eyes. Do not place in mouth. Do not eat, drink or smoke when handling this product. Upon completion of the use of this product, dispose of protective gloves safely and wash hands thoroughly with soap and water.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Properties

Appearance/ Physical State: Solution, slightly green to green.

Odour: Sweet, pungent.

Chemical Properties

Melting point/Melting range: Undetermined

Boiling point/Boiling range: Undetermined

Flash Point: Not Applicable

Autoflammability: Product is not self-igniting

Explosive Properties: None

Relative Density: Undetermined

Solubility in Water: Soluble

10. STABILITY AND REACTIVITY

Stability

Product is stable under normal handling and storage conditions.

Avoid excess heat, flame and pressure.

Thermal decomposition: None if used under ordinary conditions.

Conditions to avoid: Strong oxidising agents, high temperatures, visible light, acids, temperatures above flash point in combination with sparks, open flames, or other sources of ignition. Metals (ferrous), strong acids and isocyanates should also be avoided.

Reactivity

Dangerous Reactions: See conditions to avoid in stability section.

Hazardous decomposition products: Ammonia, nitrogen oxides, sulphur containing gases, hydrogen cyanide, carbon monoxide, carbon dioxide, toxic gases.

Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION**Acute toxicity**

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LD50 (inhalation, rat/mouse)
Phenol	317 mg/kg (rat)	630 mg/kg (rabbit)	no data available
Thiocyanate compounds	571 mg/kg	2000 mg/kg	5.319 mg/L

Primary Irritant Effect

Irritating to eyes, respiratory system and skin.

Highly Toxic: Danger of very serious irreversible effects through inhalation, in contact with skin, and if swallowed.

Sensitisation Effects

Highly toxic.

Further Toxicological Information

The carcinogenic properties of this product are undetermined.

Germ cell mutagenicity: No data are available

Target Organs

Kidneys, liver, eyes, skin, respiratory tract.

12. ECOLOGICAL INFORMATION

Ecotoxicological information: Harmful to aquatic organisms may cause long-term adverse effects in the aquatic environment.

Environmental fate (Degradation, Transformation and Persistence):

Bioconcentration is not expected to occur. Biodegrades at a moderate rate.

13. DISPOSAL CONSIDERATIONS**Product Disposal**

Must be disposed of according to all local official regulations.

Do not empty into drains.

Use appropriate containment to avoid environmental contamination.

Packaging Disposal

Unclean packaging should be disposed of according to all local official regulations.

14. TRANSPORT INFORMATIONADR/RID

Proper shipping name	Phenol Solution
Hazard Class	6.1
Subsidiary Hazards ID Number	UN2821
Packaging group	II
	Toxic

IMDG

Proper shipping name	Phenol Solution
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Hazard class	6.1
Subsidiary Hazards ID Number	UN2821
Packaging group	II
EMS No	F-A, F-S
Marine pollutant	No

IATA

Proper shipping name	Phenol Solution
Hazard Class	6.1
Subsidiary Hazards ID Number	UN 2821
Packaging group	II

15.REGULATORY INFORMATION

This safety sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Signal word	Danger
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Hazard statement(s)

H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H331	Toxic if inhaled.
H341	Suspected of causing genetic defects.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.
EUH032	Contact with acids liberates very toxic gas.

Precautionary statement(s)

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
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.

Hazard symbol(s)

T/C	Toxic Corrosive
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R-phrase(s)

R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R34	Causes burns.
R68	Possible risk of irreversible effects.
R48/20/21/22	Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s)

S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
S45	In case of accident or if you feel unwell, seek

medical advice immediately
(show the label where possible).

S61

Avoid release to the environment. Refer to
special instructions/ Safety data sheets.

16. OTHER INFORMATION

United States

This product is solely for research and development purposes only and may not be used, processed or distributed for a commercial purpose. It may only be handled by technically qualified people.

Prop 65 Listed Chemicals
313 Listed Chemicals

None
Phenol

EINECS

Phenol
Thiocyanate Compounds
Ammonium Thiocyanate

203-632-7
Not established
217-175-6

The information provided in this Material Safety Data Sheet (MSDS) is accurate to the best of our present knowledge. However, this shall not constitute a guarantee for any specific product features. All substances and preparations may present unknown hazards and should be used with caution. Bioline shall not be held liable for any damage resulting from the handling of or from contact with the above product. The information supplied in this MSDS shall not establish a legally valid contractual relationship.