

## Material Safety Data Sheet

### Section 1 - Chemical Product and Company Identification

<i>MSDS Name:</i>	Thimerosal
<i>Synonyms:</i>	2-(Ethylmercuriomercapto)benzoic acid sodium salt; Ethylmercurithiosalicylic acid sodium salt
<i>Company Identification:</i>	PI Chemicals Ltd. Building B, 633 E Shan Road, Pudong New Area Shanghai 200127, China
<i>Telephone Number:</i>	86-21-58953700
<i>Fax Number:</i>	86-21-58953701

### Section 2 - Product Information

<i>Catalog Number:</i>	PI-14234
<i>CAS Number:</i>	54-64-8
<i>MDL Number:</i>	MFCD00013062
<i>EC Number:</i>	200-210-4
<i>Purity:</i>	97.0%

### Section 3 - Physical and Chemical Properties

<i>Physical state:</i>	powder
<i>Color:</i>	off-white to Beige
<i>Odor:</i>	Not determined
<i>Molecular Formula:</i>	C <sub>9</sub> H <sub>9</sub> HgO <sub>2</sub> SNa
<i>Molecular Weight:</i>	404.81
<i>Freezing/Melting Point:</i>	234-237 °C (dec.)(lit.)
<i>Boiling Point:</i>	Not available
<i>Flash Point:</i>	250 °C/482 °F
<i>Autoignition Temperature:</i>	Not available
<i>Refractive Index (n<sub>D</sub>20):</i>	Not available
<i>Density:</i>	0.977 g/cm <sup>3</sup> at 25 °C
<i>Decomposition Temperature:</i>	Not available
<i>Solubility:</i>	Not available

### Section 4 - Hazards Identification

<i>Signal word:</i>	Danger
<i>Eye:</i>	Causes eye irritation.

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<i>Skin:</i>	Causes skin irritation. Harmful if absorbed through the skin.
<i>Ingestion:</i>	May cause irritation of the digestive tract. Toxic if swallowed.
<i>Inhalation:</i>	May be harmful if inhaled. Causes respiratory tract irritation.

### ***Section 5 - First Aid Measures***

<i>Eye:</i>	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
<i>Skin:</i>	Get medical aid. Flush skin with plenty of water and soap for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops and persists.
<i>Ingestion:</i>	Get medical aid immediately. Wash mouth out with water.
<i>Inhalation:</i>	Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

### ***Section 6 - Stability and Reactivity***

<i>Chemical Stability:</i>	Stable under normal temperatures and pressures.
<i>Materials to avoid:</i>	Strong oxidizing agents, Strong acids, Strong bases.
<i>Conditions to Avoid:</i>	Has not been reported.
<i>Hazardous Decomposition Products:</i>	Carbon oxides, Sulphur oxides, Sodium oxides, Mercury/mercury oxides.
<i>Hazardous Polymerization:</i>	Has not been reported.

### ***Section 7 - Handling and Storage***

<i>Handling:</i>	Avoid breathing dust, vapor, mist, or gas. Keep container tightly closed. Avoid contact with skin and eyes. Wash thoroughly after handling. Mechanical exhaust required. Keep away from sources of ignition - No smoking.
<i>Storage:</i>	Store in a cool, dry place. Store in a tightly closed container. Away from light.

### ***Section 8 - Personal Protection***

<i>Eyes:</i>	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
<i>Skin:</i>	Wear appropriate protective gloves to prevent skin exposure.
<i>Clothing:</i>	Wear appropriate protective clothing to prevent skin exposure.
<i>Respirators:</i>	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

### ***Section 9 - Fire and Explosion Hazard Data***

<i>General Information:</i>	As in any fire, wear a self-contained breathing apparatus, MSHA/NIOSH
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(approved or equivalent) and protective clothing to prevent contact with skin and eyes.

*Extinguishing Media:* Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### Section 10 - Accidental Release Measures

*General Information:* Use proper personal protective equipment as indicated in Section 8.

*Spills/Leaks:* Vacuum or sweep up material and place into a suitable disposal container.

### Section 11 - Toxicological Information

*RTECS#:* CAS# 54-64-8: OV8400000

*LD50/LC50:* LD50 Oral - rat - 75 mg/kg. LD50 Subcutaneous - rat - 98 mg/kg  
LC50 - Oncorhynchus mykiss (rainbow trout) - 21.2 mg/l - 48.0 h

*Carcinogenicity:* Thimerosal - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

### Section 12 - Environmental information

Dangerous for the environment.

### Section 13 - Disposal Consideration

Dissolve 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 environmental regulations.

### Section 14 - Transport Information

	IATA	IMO	RID/ADR
<i>Shipping Name:</i>	Mercury compounds, solid, n.o.s. (Thimerosal)	Mercury compounds, solid, n.o.s. (Thimerosal)	Mercury compounds, solid, n.o.s. (Thimerosal)
<i>Hazard Class:</i>	6.1	6.1	6.1
<i>UN Number:</i>	2025	2025	2025
<i>Packing Group:</i>	III	III	III

### Section 15 - Regulatory Information

#### European/International Regulations

European Labeling in Accordance with EC Directives

*Pictogram:* 

*Signal word:* Danger

*Hazard statement(s)*

H300 + H310 Fatal if swallowed or in contact with skin

H320 Causes eye irritation.

H330 Fatal if inhaled.

H400 Very toxic to aquatic life.

Risk Phrases:

R26/27/28: Very Toxic by inhalation, in contact with skin and if swallowed.

R33: Danger of cumulative effects.

R50/53: Very Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 13: Keep away from food, drink and animal feeding stuffs.

S28: After contact with skin, wash immediately with plenty of with plenty of water and soap for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid.

S 36/37/39: Wear suitable protective clothing, gloves and eye/face protection

S45: In case of accident or if you feel unwell, seek medical advice immediately.

S60: This material and/or its container must be disposed of as hazardous waste.

S61: Avoid release to the environment. Refer to special instructions safety data sheet.

WGK (Water Danger/Protection)

CAS# 54-64-8: 3 Highly water polluting substance

Canada

CAS# 54-64-8: Not available

US Federal

TSCA

CAS# 54-64-8 is listed on the TSCA Inventory. It is for research and development use only.

## ***Section 16 - Additional Information***

MSDS Creation Date: Dec 12, 2011

Update: Feb 2, 2012

*The above information is believed to be accurate and represents the best knowledge available to us currently. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall PI Chemicals, be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, even if PI Chemicals has been advised of the possibility of such damages.*