

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

Product name : Thallium(I) bromide

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

According to Regulation (EC) No 1272/2008

Acute toxicity, Inhalation (Category 2)

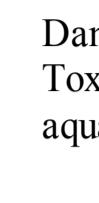
Acute toxicity, Oral (Category 2)

According to European Directive 67/548/EEC as amended.

Very toxic by inhalation and if swallowed. Danger of cumulative effects. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Label elements

Pictogram



Signal word

Danger

Hazard statement(s)

H300

Fatal if swallowed.

H330

Fatal if inhaled.

Precautionary statement(s)

P260

Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P264

Wash hands thoroughly after handling.

P284

Wear respiratory protection.

P310

Immediately call a POISON CENTER or doctor/ physician.

Hazard symbol(s)

T+

Very toxic

N

Dangerous for the environment

R-phrase(s)

R26/28

Very toxic by inhalation and if swallowed.

R33

Danger of cumulative effects.

R51/53

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

S-phrase(s)

S13

Keep away from food, drink and animal feedingstuffs.

S28

After contact with skin, wash immediately with plenty of soap and water.

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : BrTl

Molecular Weight : 284,29 g/mol

CAS-No.	EC-No.	Classification	Concentration
Thallium(I) bromide 7789-40-4	232-163-0	Acute Tox. 2; H300, H330 T+, N, R26/28 - R33 - R51/53	-

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

Further information

The product itself does not burn.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Store in cool place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Eye protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form solid

Colour yellow

Safety data

pH no data available

Melting point > 300 °C - lit.

Boiling point no data available

Flash point not applicable

Ignition temperature no data available

Lower explosion limit no data available

Upper explosion limit no data available

Density 7,5 g/cm³ at 25 °C

Water solubility no data available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Conditions to avoid

no data available

Materials to avoid

Strong oxidizing agentsStrong oxidizing agents, Potassium, Sodium/sodium oxides

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Hydrogen bromide gas, thallium oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Genetic cell mutagenicity

no data available

Carcinogenicity

no data available

IARC

No component of this product present at levels greater than 0.1% is identified as a probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Potential health effects

no data available

Signs and Symptoms of Exposure

Vomiting, diarrhoea, abdominal pain, chest pain, pulmonary edema, the most characteristic symptom of thallium poisoning is a loss of hair (alopecia), dry, scaly skin and impairment of nail growth often resulting in loss of the appearance of crescent-shaped strips across fingernails and toenails (Mees' line). Other symptoms in acute poisoning relate chiefly to the gastrointestinal tract, nervous system, skin, eyes, and cardiovascular system. Acute poisoning of the hands in swelling of the feet and legs, arthralgia, skin, eyes, and cardiovascular system. Acute poisoning of the hands in swelling of the feet and legs, arthralgia, skin, eyes, insomnia, hyperesthesia and paresthesia of the hands and feet, mental confusion, polyneuritis with severe pain in the legs and soles, partial paralysis of the legs, angina-like pains, nephritis, wasting and weakness, and lymphocytosis and eosinophilia. In chronic poisoning, central and peripheral nervous system abnormalities may persist and psychosis may develop. To the best of our knowledge, the chemical, endocrine disorders, memory loss, and psychoses may develop. The above information on the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional information

RT-ECOS: Not available

12. ECOLOGICAL INFORMATION

Toxicity

no data available

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

13. DISPOSAL CONSIDERATIONS

Product

Waste disposal and non-recyclable solutions to a licensed disposal company. Contact a licensed professional

Dispose of as unused product.</