

Safety Data Sheet

Quecksilber

SDS Revision Date:

03/02/2015



1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Identity

Quecksilber

Alternate Names

Mercury

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use

See Technical Data Sheet.

Application Method

See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name

Thermco Products, Inc.
10 Millpond Drive,
Unit #10
Lafayette, NJ 07848

Emergency

Customer Service: Thermco Products, Inc.

973.300.9100

2. Hazard identification of the product

2.1. Classification of the substance or mixture

Acute Tox. 2;H330

Fatal if inhaled.

Repr. 1B;H360D

May damage the unborn child.

STOT RE 2;H373

May cause damage to organs through prolonged or repeated exposure. Specific Target Organs: (Not Available)

Aquatic Chronic 1;H410

Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



Danger

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H330 Fatal if inhaled.

H360D May damage the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

H410 Very toxic to aquatic life with long lasting effects.

[Prevention]:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe mist / vapors / spray.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P281 Use personal protective equipment as required.

P284 Wear respiratory protection.

[Response]:

P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P308+313 IF exposed or concerned: Get medical advice / attention.

P310 Immediately call a POISON CENTER or doctor / physician.

P314 Get Medical advice / attention if you feel unwell.

P320 Specific treatment is urgent (see information on this label).

P391 Collect spillage.

[Storage]:

P403+233 Store in a well ventilated place. Keep container tightly closed.

P405 Store locked up.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

| Ingredient/Chemical Designations | Weight % | GHS Classification | Notes |
|-------------------------------------|----------|---|--------|
| Mercury CAS Number: 0007439-97-6 | 100 | Repr. 1B;H360D Acute tox. 2;H330 STOT RE 1;H372 Aquatic Acute 1;H400 Aquatic Chronic 1;H410 | [1][2] |

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

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*The full texts of the phrases are shown in Section 16.

4. First aid measures

4.1. Description of first aid measures

| | |
|-------------------|---|
| General | In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. |
| Inhalation | Remove to fresh air, keep patient warm and at rest. Call for doctor. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth. Do not use mouth to mouth or mouth to nose resuscitation. |
| Eyes | Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention. |
| Skin | Instantly wash with water and soap and rinse thoroughly. Seek immediate medical advice. |
| Ingestion | If swallowed obtain immediate medical attention. Keep at rest. Do not give anything to drink. Do NOT induce vomiting. |

4.2. Most important symptoms and effects, both acute and delayed

| | |
|-------------------|---|
| Overview | Most important symptoms and effects, both acute and delayed: Very toxic by inhalation. Accumulates in tissue and organs. Damages the unborn child and damages the inner organs after prolonged exposure. See section 2 for further details. |
| Inhalation | Fatal if inhaled. |

5. Fire-fighting measures

5.1. Extinguishing media

Use fire fighting measures that suit the environment.
The product itself does not burn.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Formation of poisonous gases during heating or in fires.
Do not breathe mist / vapors / spray.

5.3. Advice for fire-fighters

Protective equipment: In case of fire wear breathing equipment being independent of ambient air and suit provided full protection against chemicals.
Additional information
Cool endangered containers with water spray jet.
Remove fill mass from incendiary zone, if possible.
Collect contaminated fire fighting water separately. It must not enter drains.

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Do not inhale vapors.

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways. Inform respective authorities in case product reaches water or sewage system.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Collect mechanically and disposal in suitable containers. Absorb liquid components with liquid-binding material. Dispose of contaminated material as waste according to item 13. Ensure adequate ventilation.

7. Handling and storage

7.1. Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle container with care.

Work only in fume cupboard.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

Avoid contact with eyes and skin.

Don't eat, drink or smoke while working.

Information about protection against explosions and fires: Keep breathing equipment ready.

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Incompatible materials: Acetylides, ammonia, amines, alkali metals, azides, metals, halogens, acids, conc, sulfuric acid, nitric acid / hydrogen halide acids, carbides, halogen oxides.

Store only in the original container.

Unsuitable material for container: aluminium.

Keep container tightly closed and store upright to prevent any run out of product.

Accessible only for authorized persons.

Information about storage in one common storage facility: Store away from metals.

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

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8. Exposure controls and personal protection

8.1. Control parameters

Exposure

| CAS No. | Ingredient | Source | Value |
|--------------|------------|----------|--|
| 0007439-97-6 | Mercury | OSHA | TWA 0.1 mg/m ³ |
| | | ACGIH | Alkyl compounds TWA: 0.01 mg/m ³ STEL 0.03 mg/m ³ Skin Aryl compounds TWA: 0.05 mg/m ³ C 0.1 mg/m ³ Skin |
| | | NIOSH | No Established Limit |
| | | Supplier | No Established Limit |

Carcinogen Data

| CAS No. | Ingredient | Source | Value |
|--------------|------------|--------|---|
| 0007439-97-6 | Mercury | OSHA | Select Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No; |

8.2. Exposure controls

Respiratory

If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

Eyes

Safety glasses recommended during refilling.

Skin

Wear overalls to keep skin contact to a minimum. Use gloves of stable material (e.g. Nitrile) - if necessary tricoted to improve the wearability.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. Penetration time of glove material: The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

With a lamination strength of 0,11 mm the permeation time is > 480 min.

For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable: Nitrile rubber, NBR

Engineering Controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

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Other Work Practices Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

| | |
|--|---|
| Appearance | Silver grey Liquid |
| Odor | Odorless |
| Odor threshold | Not Measured |
| pH | NA |
| Melting point / freezing point | - 38.86 C |
| Initial boiling point and boiling range | 356 C |
| Flash Point | NA |
| Evaporation rate (Ether = 1) | NA |
| Flammability (solid, gas) | Not Applicable |
| Upper/lower flammability or explosive limits | Lower Explosive Limit: NA Upper Explosive Limit: NA |
| Vapor pressure (Pa) | 0.00163 hPa (at 20C) |
| Vapor Density | 6.93 g/cm ³ (at 20C) |
| Density | 13.54 g/cm ³ (at 20C) |
| Partition coefficient n-octanol/water (Log Kow) | Not Measured |
| Auto-ignition temperature | NA |
| Decomposition temperature | NA |
| Viscosity (cSt) | dynamic at 20 C: 1.55 mPas Organic solvents: 0.00% Water: 0.00% |
| Partition Coefficient | (n-octanol/water) NA |
| Solubility in/Miscibility with Water | 0.0567 mg/l (at 25C) |

9.2. Other information

No other relevant information.

10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

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10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

Acetylides, ammonia, amines, alkali metals, azides, metals, halogens, acids, concentrated sulfuric acid, nitric acid / hydrogen halide acids, carbides, halogen oxides.

10.6. Hazardous decomposition products

No hazardous decomposition data available.

11. Toxicological information

Acute toxicity

| Ingredient | Oral LD50, mg/kg | Skin LD50, mg/kg | Inhalation Vapor LD50, mg/L/4hr | Inhalation Dust/Mist LD50, mg/L/4hr | Inhalation Gas LD50, ppm |
|-----------------------|-----------------------------|----------------------|---------------------------------------|---|--------------------------------|
| Mercury - (7439-97-6) | 37.00, Rat - Category: 2 | No data available | No data available | No data available | No data available |

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

| Classification | Category | Hazard Description |
|-------------------------------|----------|--|
| Acute toxicity (oral) | --- | Not Applicable |
| Acute toxicity (dermal) | --- | Not Applicable |
| Acute toxicity (inhalation) | 2 | Fatal if inhaled. |
| Skin corrosion/irritation | --- | Not Applicable |
| Serious eye damage/irritation | --- | Not Applicable |
| Respiratory sensitization | --- | Not Applicable |
| Skin sensitization | --- | Not Applicable |
| Germ cell mutagenicity | --- | Not Applicable |
| Carcinogenicity | --- | Not Applicable |
| Reproductive toxicity | 1B | May damage the unborn child. |
| STOT-single exposure | --- | Not Applicable |
| STOT-repeated exposure | 2 | May cause damage to organs through prolonged or repeated exposure. |
| Aspiration hazard | --- | Not Applicable |

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12. Ecological information

12.1. Toxicity

Very toxic to aquatic life with long lasting effects. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

| Ingredient | 96 hr LC50 fish, mg/l | 48 hr EC50 crustacea, mg/l | ErC50 algae, mg/l |
|-----------------------|-----------------------|----------------------------|-------------------|
| Mercury - (7439-97-6) | Not Available | 0.0052, Daphnia magna | Not Available |

12.2. Persistence and degradability

This product is not biodegradable

12.3. Bioaccumulative potential

Extremely bioaccumulative

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Contact manufacturer for recycling information.

Can be reused after processing.

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14. Transport information

| | DOT (Domestic Surface Transportation) | IMO / IMDG PSN (Ocean Transportation) | ICAO/IATA PSN |
|------------------------------------|---|---|---|
| 14.1. UN number | UN3506: Mercury, Contained in Manufactured Articles | UN3506: Mercury, Contained in Manufactured Articles | UN3506: Mercury, Contained in Manufactured Articles |
| 14.2. UN proper shipping name | UN3506: Mercury, Contained in Manufactured Articles, 8, III | UN3506: Mercury, Contained in Manufactured Articles | UN3506: Mercury, Contained in Manufactured Articles |
| 14.3. Transport hazard class(es) | DOT Hazard Class: 8 DOT Label: 8, 6.1 | IMDG: 8 Sub Class 6.1 | Air Class: 8 Sub Class 6.1 |
| 14.4. Packing group | III | III | III |
| 14.5. Environmental hazards | | | |
| IMDG | Marine Pollutant: Yes (Mercury, Contained in Manufactured Articles) | | |
| 14.6. Special precautions for user | No further information | | |

15. Regulatory information

| | | | |
|--|---|--|--|
| Regulatory Overview | The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented. | | |
| Toxic Substance Control Act (TSCA) | All components of this material are either listed or exempt from listing on the TSCA Inventory. | | |
| WHMIS Classification | D1A | | |
| US EPA Tier II Hazards | Fire: No Sudden Release of Pressure: No Reactive: No Immediate (Acute): Yes Delayed (Chronic): Yes | | |
| EPCRA 311/312 Chemicals and RQs (lbs): | Mercury (1.00) | | |
| EPCRA 302 Extremely Hazardous : | (No Product Ingredients Listed) | | |
| EPCRA 313 Toxic Chemicals: | Mercury | | |
| Proposition 65 - Carcinogens (>0.0%): | (No Product Ingredients Listed) | | |
| Proposition 65 - Developmental Toxins (>0.0%): | (No Product Ingredients Listed) | | |

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Proposition 65 - Female Repro Toxins (>0.0%): (No Product Ingredients Listed)

Proposition 65 - Male Repro Toxins (>0.0%): (No Product Ingredients Listed)

N.J. RTK Substances (>1%):

Mercury

Penn RTK Substances (>1%):

Mercury

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H330 Fatal if inhaled.

H360D May damage the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.

Disclaimer: This information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

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