

SAFETY DATA SHEET

spectrum®



Revision date 24-November-2022

Revision Number 2

1. Identification

Product identifier

Product Name MERCURY, TRIPLE DISTILLED, REAGENT, ACS

Other means of identification

Product Code(s) M1215

UN/ID no UN2809

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use No information available

Restrictions on use No information available

Details of the supplier of the safety data sheet

Supplier Address

Spectrum Chemical Mfg. Corp.
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

2. Hazard(s) identification

Classification

| | |
|--|-------------|
| Acute toxicity - Inhalation (Vapors) | Category 2 |
| Acute toxicity - Inhalation (Dusts/Mists) | Category 2 |
| Skin sensitization | Category 1A |
| Reproductive toxicity | Category 1A |
| Specific target organ toxicity (repeated exposure) | Category 1 |
| Corrosive to metals | Category 1 |

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Danger

Hazard statements

Fatal if inhaled

May cause an allergic skin reaction
May damage fertility or the unborn child
Causes damage to organs through prolonged or repeated exposure
May be corrosive to metals



Appearance Metal Shiny

Physical state Liquid

Odor No information available

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not get in eyes, on skin, or on clothing
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wear respiratory protection
Contaminated work clothing must not be allowed out of the workplace
Keep only in original container

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
Specific treatment is urgent (see .? on this label)
IF ON SKIN: Wash with plenty of water
Wash contaminated clothing before reuse
If skin irritation or rash occurs: Get medical advice/attention
IF INHALED: Remove person to fresh air and keep comfortable for breathing
Immediately call a POISON CENTER or doctor
Absorb spillage to prevent material damage

Precautionary Statements - Storage

Store locked up.
Store in a well-ventilated place. Keep container tightly closed
Store in corrosive resistant/ .? container with a resistant inner liner

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Unknown acute toxicity

Other information

Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

3. Composition/information on ingredients

Substance

| Chemical name | CAS No | Weight-% |
|---------------|-----------|----------|
| Mercury | 7439-97-6 | 100 |

4. First-aid measures

Description of first aid measures

| | |
|---|--|
| General advice | Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. |
| Inhalation | Remove to fresh air. Get medical attention immediately if symptoms occur. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get immediate medical advice/attention. |
| Skin contact | Get immediate medical advice/attention. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. May cause an allergic skin reaction. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get immediate medical advice/attention. |
| Self-protection of the first aider | Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Do not breathe vapor or mist. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Use personal protective equipment as required. See section 8 for more information. |

Most important symptoms and effects, both acute and delayed

| | |
|-----------------|---|
| Symptoms | Coughing and/ or wheezing. Difficulty in breathing. Itching. Rashes. Hives. May cause redness and tearing of the eyes. Burning sensation. |
|-----------------|---|

Indication of any immediate medical attention and special treatment needed

| | |
|---------------------------|--|
| Note to physicians | May cause sensitization in susceptible persons. Treat symptomatically. |
|---------------------------|--|

5. Fire-fighting measures

| | |
|---|--|
| Suitable Extinguishing Media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Large Fire | CAUTION: Use of water spray when fighting fire may be inefficient. |
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. |
| Specific hazards arising from the chemical | Product is or contains a sensitizer. May cause sensitization by skin contact. |
| Hazardous combustion products | No information available. |
| Explosion data | |
| Sensitivity to mechanical impact | none. |
| Sensitivity to static discharge | none. |
| Special protective equipment for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Do not breathe vapor or mist. Keep people away from and upwind of spill/leak.

Other information Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash before reuse. Do not breathe vapor or mist. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|----------------------|-------------------|-------------------------------|------------|
| Mercury 7439-97-6 | No data available | 0.1 mg/m ³ Ceiling | - |

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves. Impervious gloves.

Skin and body protection Impervious clothing. Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General hygiene considerations

Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Do not breathe vapor or mist. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Information on basic physical and chemical properties

| | |
|-----------------------|--------------------------|
| Physical state | Liquid |
| Appearance | Metal Shiny |
| Color | silver Gray |
| Odor | No information available |
| Odor threshold | No information available |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|---|--------------------|-------------------------|
| pH | no data available | None known |
| Melting point / freezing point | -39 °C / -38.2 °F | None known |
| Boiling point / boiling range | 357 °C / 674.6 °F | None known |
| Flash point | no data available | None known |
| Evaporation rate | no data available | None known |
| Flammability (solid, gas) | no data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive limits | No data available | |
| Lower flammability or explosive limits | No data available | |
| Vapor pressure | No data available | None known |
| Vapor density | no data available | None known |
| Relative density | 13.6 | None known |
| Water solubility | Insoluble in water | None known |
| Solubility(ies) | no data available | None known |
| Partition coefficient | No data available | None known |
| Autoignition temperature | no data available | None known |
| Decomposition temperature | | None known |
| Kinematic viscosity | no data available | None known |
| Dynamic viscosity | No data available | None known |

Other information

| | |
|-----------------------------|--------------------------|
| Explosive properties | No information available |
| Oxidizing properties | No information available |
| Softening point | No information available |
| Molecular weight | No information available |
| VOC Content (%) | No information available |
| Liquid Density | No information available |
| Bulk density | No information available |

10. Stability and reactivity

| | |
|---|---|
| Reactivity | No information available. |
| Chemical stability | Stable under normal conditions. |
| Possibility of hazardous reactions | None under normal processing. |
| Conditions to avoid | Exposure to air or moisture over prolonged periods. Excessive heat. |
| Incompatible materials | Oxidizing agent. |
| Hazardous decomposition products | None known based on information supplied. |

11. Toxicological information

Information on likely routes of exposure

Product Information

| | |
|---------------------|---|
| Inhalation | Specific test data for the substance or mixture is not available. Fatal if inhaled. (based on components). May cause irritation of respiratory tract. |
| Eye contact | Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain. |
| Skin contact | Specific test data for the substance or mixture is not available. Fatal in contact with skin. (based on components). May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. May cause irritation. Prolonged contact may cause redness and irritation. |
| Ingestion | Specific test data for the substance or mixture is not available. Fatal if swallowed. (based on components). Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. |

Symptoms related to the physical, chemical and toxicological characteristics

| | |
|-----------------|--|
| Symptoms | Coughing and/ or wheezing. Difficulty in breathing. Itching. Rashes. Hives. May cause redness and tearing of the eyes. |
|-----------------|--|

Acute toxicity

Numerical measures of toxicity

No information available

Unknown acute toxicity

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|--|--|
| Skin corrosion/irritation | May cause skin irritation. |
| Serious eye damage/eye irritation | Classification based on data available for ingredients. Causes serious eye irritation. |
| Respiratory or skin sensitization | May cause sensitization by skin contact. |
| Germ cell mutagenicity | No information available. |
| Carcinogenicity | No information available. |

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical name | ACGIH | IARC | NTP | OSHA |
|----------------------|-------|---------------------|-----|------|
| Mercury 7439-97-6 | - | Monograph 58 [1993] | - | - |

Legend

| | |
|---------------------------------|---|
| Reproductive toxicity | Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. May damage fertility or the unborn child. |
| STOT - single exposure | No information available. |
| STOT - repeated exposure | Causes damage to organs through prolonged or repeated exposure. |
| Target organ effects | kidney, respiratory system, Eyes, Skin, central nervous system. |
| Aspiration hazard | No information available. |
| Other adverse effects | No information available. |
| Interactive effects | No information available. |

12. Ecological information

| | |
|--------------------|---|
| Ecotoxicity | Very toxic to aquatic life with long lasting effects. |
|--------------------|---|

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|----------------------|----------------------|---|----------------------------|----------------------------------|
| Mercury 7439-97-6 | - | LC50: =0.16mg/L (96h, Cyprinus carpio) LC50: =0.18mg/L (96h, Cyprinus carpio) LC50: =0.5mg/L (96h, Cyprinus carpio) LC50: =0.9mg/L (96h, Oryzias latipes) | - | EC50: =5.0µg/L (96h, water flea) |

Persistence and degradability No information available.
Bioaccumulation Inherently biodegradable.

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. Transport information

DOT

UN/ID no UN2809
Proper Shipping Name: Mercury
Hazard class 8
Subsidiary Class 6.1
Packing group: III
Special Provisions 365
Description: UN2809, Mercury, 8 (6.1), III, Marine pollutant

TDG

UN-No: UN2809
Proper Shipping Name: Mercury
Hazard class 8
Subsidiary Class 6.1
Packing Group: III
Special Provisions 126
Description: UN2809, Mercury, 8 (6.1), III

MEX

UN-No UN2809
Proper Shipping Name Mercury
Hazard class 8
Packing Group III
Description UN2809, Mercury, 8, III

ICAO (air)

UN-No: UN2809
Proper Shipping Name: Mercury
Hazard class 8
Packing Group: III
Special Provisions A48, A69
Description: UN2809, Mercury, 8, III

IATA

UN number UN2809
Proper Shipping Name: Mercury
Transport hazard class(es) 8
Subsidiary hazard class 6.1
Packing group III
ERG Code 8P
Special Provisions A804
Description: UN2809, Mercury, 8 (6.1), III

IMDG

UN number UN2809
Proper shipping name Mercury
Transport hazard class(es) 8
Packing group III
EmS-No F-A, S-B
Special Provisions 365
Marine pollutant P
Description UN2809, Mercury, 8, III, Marine pollutant

RID

UN number UN2809
Proper Shipping Name: MERCURY
Transport hazard class(es) 8
Packing group III
Classification code CT1
Special Provisions 365
Description: UN2809, MERCURY, 8 (6.1), III, ENVIRONMENTALLY HAZARDOUS
Labels 8 + 6.1

ADR

UN number UN2809
Proper Shipping Name: Mercury
Transport hazard class(es) 8
Subsidiary hazard class 6.1
Packing group III
Classification code CT1
Tunnel restriction code (E)
Special Provisions 365
Description: UN2809, Mercury, 8 (6.1), III, (E), ENVIRONMENTALLY HAZARDOUS
Labels 8 + 6.1

ADN

UN/ID No UN2809
Proper shipping name Mercury
Transport hazard class(es) 8
Packing Group III
Classification code CT1
Special Provisions 365
Description UN2809, Mercury, 8 (+ 6.1), III, ENVIRONMENTALLY HAZARDOUS
Hazard label(s) 8 + 6.1
ventilation VE02
Equipment Requirements PP, EP, EX, TOX, A

15. Regulatory information

International Inventories

TSCA Complies

DSL/NDL Complies

EINECS/ELINCS Complies

ENCS This product complies with ENCS:

IECSC This product complies with China:

KECL Complies

PICCS Complies
AICS All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

| Chemical name | SARA 313 - Threshold Values % |
|---------------------|-------------------------------|
| Mercury - 7439-97-6 | 1.0 |

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

| Chemical name | Hazardous Substances RQs | Extremely Hazardous Substances RQs |
|----------------------|------------------------------------|------------------------------------|
| Mercury 7439-97-6 | 1 lb final RQ 0.454 kg final RQ | - |

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:.

| Chemical name | California Proposition 65 |
|---------------------|---------------------------|
| Mercury - 7439-97-6 | developmental toxicity |

U.S. State Right-to-Know Regulations

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|----------------------|------------|---------------|----------------------|
| Mercury 7439-97-6 | 1183 | Present | Environmental hazard |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA

Health hazards 4
Flammability 0
Instability 0
Physical and chemical properties -

HMIS

Health hazards 4 *
Flammability 0
Physical hazards 0
Personal protection X

Chronic Hazard Star Legend

* = Chronic Health Hazard

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

| | | | |
|---------|-----------------------------|------|----------------------------------|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | | |

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGl(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Revision date 24-November-2022

Revision Note No information available.

Disclaimer

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet