1. IDENTIFICATION

Product identifier

Product code: T2446
Product Name: TETRAKIS(DECYL)AMMONIUM BROMIDE

Other means of identification

Synonyms: Tetradecylammonium Bromide
CAS #: 14937-42-9
RTECS #: Not available
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available.
Uses advised against: No information available

Supplier:
Spectrum Chemicals and Laboratory Products, Inc.
14422 South San Pedro St.
Gardena, CA  90248
(310) 516-8000

Order Online At: https://www.spectrumchemical.com

Emergency telephone number
Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Regina Wachenheim (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)
Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Not classified

Hazards not otherwise classified (HNOC)
Not Applicable

Other hazards
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Weight %</th>
<th>Trade Secret</th>
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<tbody>
<tr>
<td>Tetrakis(decyl)ammonium Bromide</td>
<td>14937-42-9</td>
<td>100</td>
<td>*</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

First aid measures

General Advice: Poison information centres in each State capital city can provide additional assistance for scheduled poisons (13 1126)

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops. Consult a physician if necessary.

Eye Contact: Flush eye with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms: May cause slight irritation.

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Carbon dioxide (CO2), Dry chemical. Water spray mist or foam.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous Combustion Products: Carbon monoxide; Carbon dioxide; Nitrogen oxides; Hydrogen bromide gas

Specific hazards: May be combustible at high temperatures. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
Special Protective Actions for Firefighters

Specific Methods: No information available.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Remove all sources of ignition.

Environmental precautions No information available.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions: Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. All equipment used when handling the product must be grounded. Keep away from incompatible materials.

Safe Handling Advice: Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not ingest. Do not breathe vapours/dust. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities


Incompatible Materials: Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

U.S Occupational Exposure Limits: Not determined

United States

<table>
<thead>
<tr>
<th>Components</th>
<th>OSHA</th>
<th>NIOSH</th>
<th>ACGIH</th>
<th>AIHA WHEEL</th>
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Product code: T2446

Product name: TETRAKIS(DECYL)AMMONIUM BROMIDE
Canada
Canada Occupational Exposure Limits: Not determined

<table>
<thead>
<tr>
<th>Components</th>
<th>Alberta</th>
<th>British Columbia</th>
<th>Ontario</th>
<th>Quebec</th>
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<td>None</td>
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</table>

Australia and Mexico
Occupational Exposure Limits for Australia and Mexico: Not determined

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<tr>
<th>Components</th>
<th>Australia</th>
<th>Mexico</th>
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</thead>
<tbody>
<tr>
<td>Tetrakis(decyl)ammonium Bromide - 14937-42-9</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering measures to reduce exposure:
Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection: Safety glasses. Safety glasses with side-shields.

Skin and body protection: Long sleeved clothing. Chemical resistant apron. Gloves.

Respiratory protection: Effective dust mask. Wear respirator with dust filter.

Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Product code: T2446

Product name: TETRAKIS(DECYL)AMMONIUM BROMIDE
### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Physical state:</td>
<td>Solid</td>
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<tr>
<td>Appearance:</td>
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<tr>
<td>Color:</td>
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<tr>
<td>Odor:</td>
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</tr>
<tr>
<td>Taste:</td>
<td>No information available</td>
</tr>
<tr>
<td>Molecular/Formula weight:</td>
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</tr>
<tr>
<td>Flash point (°C):</td>
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</tr>
<tr>
<td>Flash point Tested according to:</td>
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<tr>
<td>Autoignition Temperature (°C/°F):</td>
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<tr>
<td>Boiling point/range (°C/°F):</td>
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<td>Odor threshold (ppm):</td>
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<tr>
<td>Partition coefficient (n-octanol/water):</td>
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<tr>
<td>Miscibility:</td>
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<tr>
<td>Solubility:</td>
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<td>Physical state:</td>
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<td>Odor:</td>
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<td>Taste:</td>
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<td>Flash point Tested according to:</td>
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<td>Autoignition Temperature (°C/°F):</td>
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<td>Boiling point/range (°C/°F):</td>
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<td>Vapor density:</td>
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<td>Odor threshold (ppm):</td>
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<tr>
<td>Partition coefficient (n-octanol/water):</td>
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</tr>
<tr>
<td>Miscibility:</td>
<td>No information available</td>
</tr>
<tr>
<td>Solubility:</td>
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</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

**Reactivity**
- Reactive with oxidizing agents

**Chemical stability**
- Stability: Stable at normal conditions
- Possibility of Hazardous Reactions: Hazardous polymerization does not occur

**Conditions to avoid:**
- Heat. Avoid dust formation. Dust may form explosive mixture in air. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

**Incompatible Materials:**
- Strong oxidizing agents.

**Hazardous decomposition products:**

### 11. TOXICOLOGICAL INFORMATION

**Product code:** T2446
**Product name:** TETRakis(Decyl)AMMONIUM BROMIDE

**Corrosivity:** No information available

**Special Remarks on Corrosivity:** No information available
11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Ingestion. Inhalation.

Acute Toxicity

Component Information

*Tetrakis(decyl)ammonium Bromide - 14937-42-9*

LD$_{50}$/oral/rat = No information available
LD$_{50}$/oral/mouse = No information available
LD$_{50}$/dermal/rabbit = No information available
LD$_{50}$/dermal/rat = No information available
LC$_{50}$/inhalation/rat = No information available
LC$_{50}$/inhalation/mouse = No information available
Other LD$_{50}$ or LC$_{50}$ information = No information available

Product Information

LD$_{50}$/oral/rat =
VALUE- Acute Tox Oral = No information available

LD$_{50}$/oral/mouse =
Value - Acute Tox Oral = No information available

LD$_{50}$/dermal/rabbit
VALUE-Acute Tox Dermal = No information available

LD$_{50}$/dermal/rat
VALUE -Acute Tox Dermal = No information available

LC$_{50}$/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC$_{50}$/Inhalation/mouse
VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: May cause skin irritation.

Eye Contact: Contact with eyes may cause irritation.

Inhalation May cause irritation of respiratory tract.

Ingestion No information available. Health injuries are not known or expected under normal use.

Aspiration hazard No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure
Chronic Toxicity: No information available.

Sensitization: No information available

Mutagenic Effects: No information available

Carcinogenic effects: Not considered carcinogenic.

<table>
<thead>
<tr>
<th>Components</th>
<th>ACGIH - Carcinogens</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA HCS - Carcinogens</th>
<th>Australia - Prohibited Carcinogenic Substances</th>
<th>Australia - Notifiable Carcinogenic Substances</th>
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<tr>
<td>Tetrakis(decyl)ammonium Bromide</td>
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<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

ACGIH (American Conference of Governmental Industrial Hygienists)
IARC (International Agency for Research on Cancer)
NTP (National Toxicology Program)
OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity: No data is available

Reproductive Effects: No information available

Developmental Effects: No information available

Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure: No information available

STOT - repeated exposure: No information available

Target Organs: No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.

Persistence and degradability: No information available

Bioaccumulative potential: No information available

Mobility: No information available

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:
Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:
Empty containers should be taken for local recycling, recovery or waste disposal

Product code: T2446
Product name: TETRAKIS(DECYL)AMMONIUM BROMIDE
---|---|---|---|---
Tetrakis(decyl)ammonium Bromide | None | None | None | None

14. TRANSPORT INFORMATION

**DOT**
- UN-No: Not regulated
- Proper Shipping Name: No information available
- Hazard Class: No information available
- Subsidiary Risk: Not applicable
- Packing Group: None
- Marine Pollutant: No data available
- ERG No: No information available
- DOT RQ (lbs): No information available

**TDG (Canada)**
- UN-No: Not Regulated
- Proper Shipping Name: No information available
- Hazard Class: No information available
- Subsidiary Risk: No information available
- Packing Group: No information available
- Description: No information available

**ADR**
- UN-No: Not Regulated
- Proper Shipping Name: No information available
- Hazard Class: No information available
- Packing Group: No information available
- Subsidiary Risk: No information available
- Classification Code: No information available
- Description: No information available
- CEFIC Tremcard No: No information available

**IMO / IMDG**
- UN-No: Not Regulated
- Proper Shipping Name: No information available
- Hazard Class: No information available
- Subsidiary Risk: No information available
- Packing Group: No information available
- Description: No information available
- IMDG Page: No information available
- Marine Pollutant: No information available
- MFAQ: No information available
- Maximum Quantity: No information available

**RID**
- UN-No: Not Regulated
- Proper Shipping Name: No information available
- Hazard Class: No information available
- Subsidiary Risk: No information available
- Packing Group: No information available
- Classification Code: No information available
- Description: No information available

Product code: T2446  
Product name: TETRAKIS(DECYL)AMMONIUM BROMIDE
## 14. TRANSPORT INFORMATION

### ICAO
- **UN-No:** Not Regulated
- **Proper Shipping Name:** No information available
- **Hazard Class:** No information available
- **Subsidiary Risk:** No information available
- **Packing Group:** No information available
- **Description:** No information available

### IATA
- **UN-No:** Not Regulated
- **Proper Shipping Name:** No information available
- **Hazard Class:** No information available
- **Subsidiary Risk:** No information available
- **Packing Group:** No information available
- **Description:** No information available

## 15. REGULATORY INFORMATION

### International Inventories

<table>
<thead>
<tr>
<th>Components</th>
<th>U.S. TSCA</th>
<th>Philippines (PICCS)</th>
<th>KOREA KECL</th>
<th>Japan ENCS</th>
<th>CHINA</th>
<th>Australia (AICS)</th>
<th>EINECS-No.</th>
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<tr>
<td>Tetrakis(decyl)ammonium Bromide</td>
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<td>Not present</td>
<td>Not present</td>
<td>Present 239-013-3</td>
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### U.S. Regulations


**Chemicals Known to the State of California to Cause Cancer:**
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

**Chemicals Known to the State of California to Cause Reproductive Toxicity:**
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

<table>
<thead>
<tr>
<th>Components</th>
<th>Carcinogen</th>
<th>Developmental Toxicity</th>
<th>Male Reproductive Toxicity</th>
<th>Female Reproductive Toxicity</th>
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### CERCLA/SARA

<table>
<thead>
<tr>
<th>Components</th>
<th>CERCLA - Hazardous Substances and their Reportable Quantities</th>
<th>Section 302 Extremely Hazardous Substances and TPQs</th>
<th>Section 302 Extremely Hazardous Substances and RQs</th>
<th>Section 313 - Chemical Category</th>
<th>Section 313 - Reporting de minimis</th>
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<tbody>
<tr>
<td>Tetrakis(decyl)ammonium Bromide</td>
<td>None</td>
<td>None</td>
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### U.S. TSCA

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<thead>
<tr>
<th>Components</th>
<th>TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)</th>
<th>TSCA 8(d) - Health and Safety Reporting</th>
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<td>Tetrakis(decyl)ammonium Bromide</td>
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### Canada

**Product code:** T2446

**Product name:** TETRAKIS(DECYL)AMMONIUM BROMIDE
WHMIS hazard class:
Non-controlled

Canada Controlled Products Regulation:
This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

<table>
<thead>
<tr>
<th>Components</th>
<th>Canada (DSL)</th>
<th>Canada (NDSL)</th>
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<tbody>
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<td>Tetrakis(decyl)ammonium Bromide</td>
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<tr>
<th>Components</th>
<th>CEPA Schedule I - Toxic Substances</th>
<th>CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting</th>
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<td>Tetrakis(decyl)ammonium Bromide</td>
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EU Classification

R-phrase(s)
not determined

S -phrase(s)
none

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<tr>
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<th>Concentration Limits:</th>
<th>Safety Phrases</th>
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<td>Tetrakis(decyl)ammonium Bromide</td>
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The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:
Not dangerous

16. OTHER INFORMATION
16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>HMIS</th>
<th>Personal Protective Equipment</th>
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<tr>
<td>1</td>
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</table>

See Section 8.

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Material Safety Data Sheet

**Product code:** T2446

**Product name:**

TETRAKIS(DECYL)AMMONIUM BROMIDE

**Preparation Date:** 3/11/2013

**Revision Date:** 3/11/2013

**Prepared by:** Sonia Owen