

Safety Data Sheet

Quatricide® PV



SDS Revision Date:

04/01/2015

1. Identification

1.1. Product identifier

Product Identity Quatricide® PV

Alternate Names Quatricide® PV

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 Pharmacal Research Labs., Inc.
562 Captain Neville Dr.
Waterbury, CT 06705, USA

Emergency

CHEMTREC (USA) (800) 424-9300

IN CANADA CALL CANUTEC (613) 996-6666

Customer Service: Pharmacal Research Labs., Inc. 203-755-4908, (800)-243-5350

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Skin Irrit. 2;H315 Causes skin irritation.

Eye Dam. 1;H318 Causes serious eye damage.

Aquatic Acute 1;H400 Very toxic to aquatic life.

Aquatic Chronic 2;H411 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

H315 Causes skin irritation.

H318 Causes serious eye damage.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

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[Prevention]:

- P260 Do not breathe mist / vapors / spray.
- P262 Do not get in eyes, on skin, or on clothing.
- P264 Wash thoroughly after handling.
- P273 Avoid release to the environment.
- P280 Wear protective gloves / eye protection / face protection.

[Response]:

- P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician.
- P302+352 IF ON SKIN: Wash with plenty of soap and water.
- P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
- P310 Immediately call a POISON CENTER or doctor / physician.
- P321 Specific treatment (see information on this label).
- P331 Do NOT induce vomiting.
- P332+313 If skin irritation occurs: Get medical advice / attention.
- P362 Take off contaminated clothing and wash before reuse.
- P391 Collect spillage.

[Storage]:

No GHS storage statements

[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 |
|---|----------|---|-------|
| 1-Decanaminium, N-decyl-N,N-dimethyl-, chloride CAS Number: 0007173-51-5 | 1.0 - 10 | Acute Tox. 4;H302 Skin Corr. 1B;H314 | [1] |
| Tetrasodium EDTA CAS Number: 0000064-02-8 | 1.0 - 10 | Acute Tox. 4;H302 Eye Dam. 1;H318 | [1] |
| Alkyl dimethyl benzyl ammonium chloride CAS Number: Proprietary | 1.0 - 10 | Flam. Liq. 3;H226 Acute Tox. 4;H302 Skin Corr. 1B;H314 Eye Dam. 1;H318 Aquatic Acute 1;H400 Aquatic Chronic 1;H410 | [1] |

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

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

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

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

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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. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth. |
| Eyes | Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention. |
| Skin | Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser. |
| Ingestion | Give 3-4 glasses of water, but DO NOT induce vomiting. If vomiting occurs, give fluids again. Get medical attention to determine whether vomiting or evacuation of stomach is necessary. Do not give anything by mouth to an unconscious or convulsing person. |

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

| | |
|-----------------|---|
| Overview | <p>Skin: Direct skin contact will produce severe irritation, which, upon prolonged contact, may produce skin burns.</p> <p>Eyes: Direct contact will produce severe irritation and/or burns.</p> <p>Inhalation: Direct contact or exposure to high concentration of mists or vapors may cause irritation.</p> <p>Ingestion: Ingestion can produce immediate burning pain in the mouth, throat and abdomen; severe swelling of the larynx; skeletal muscle paralysis affecting the ability to breathe; circulatory shock; and/or convulsions.</p> <p>Chronic: No adverse effects are expected.</p> <p>Possible mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, as well as oxygen and measures to support breathing manually or mechanically may be needed. See section 2 for further details.</p> |
| Eyes | Causes serious eye damage. |
| Skin | Causes skin irritation. |

5. Fire-fighting measures

5.1. Extinguishing media

Any media suitable for the surrounding fire.

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5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Oxides of carbon and nitrogen.

Do not breathe mist / vapors / spray.

Do not get in eyes, on skin, or on clothing.

5.3. Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear.

Special Fire Fighting Procedures: Use water spray to cool fire-exposed surfaces and to protect personnel. Isolate "fuel" supply from fire.

ERG Guide No. ----

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

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

Spill Cleanup: Absorb spills with vermiculite, fuller's earth, or sand. Shovel up and place in a non-metal waste container for disposal. Dike large spills with soil or sandbags to contain it and prevent its spread.

Large Spills: Prevent liquid from entering sewers or waterways. Dike far ahead of liquid spill for later disposal. Pump into containers for disposal.

7. Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Wash thoroughly after work using soap and water.

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: No data available.

Keep container tightly closed. Keep away from heat, and sunlight. Storage temperature range: 20-30 o C. If material freezes, separates or becomes hazy, gently thaw at about 40 o C prior to use. Mild agitation may be required.

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

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7.3. Specific end use(s)

No data available.

8. Exposure controls and personal protection

8.1. Control parameters

Exposure

| CAS No. | Ingredient | Source | Value |
|--------------|---|----------|----------------------|
| 0000064-02-8 | Tetrasodium EDTA | OSHA | No Established Limit |
| | | ACGIH | No Established Limit |
| | | NIOSH | No Established Limit |
| | | Supplier | No Established Limit |
| 0007173-51-5 | 1-Decanaminium, N-decyl-N,N-dimethyl-, chloride | OSHA | No Established Limit |
| | | ACGIH | No Established Limit |
| | | NIOSH | No Established Limit |
| | | Supplier | No Established Limit |
| Proprietary | Alkyl dimethyl benzyl ammonium chloride | OSHA | No Established Limit |
| | | ACGIH | No Established Limit |
| | | NIOSH | No Established Limit |
| | | Supplier | No Established Limit |

Carcinogen Data

| CAS No. | Ingredient | Source | Value |
|--------------|---|--------|--|
| 0000064-02-8 | Tetrasodium EDTA | OSHA | Select Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |
| 0007173-51-5 | 1-Decanaminium, N-decyl-N,N-dimethyl-, chloride | OSHA | Select Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |
| Proprietary | Alkyl dimethyl benzyl ammonium chloride | OSHA | Select Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |

8.2. Exposure controls

Respiratory

In operations where mists are generated, wear a NIOSH/MSHA approved respirator that has been selected by a technically qualified person for the specific work conditions.

Eyes

Wear chemical goggles. Use a face shield if splashing is possible.

Skin

Wear overalls to keep skin contact to a minimum. Natural rubber, neoprene, or nitrile gloves is recommended.

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Engineering Controls In applications where the product will be exposed to elevated temperatures, use local ventilation to remove potential decomposition products.

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 | Yellow Liquid |
| Odor | Mild |
| Odor threshold | Not Measured |
| pH | 7.0 - 10.0 |
| Melting point / freezing point | Not Measured |
| Initial boiling point and boiling range | Not Measured |
| Flash Point | > 200 F |
| Evaporation rate (Ether = 1) | Not Measured |
| Flammability (solid, gas) | Not Applicable |
| Upper/lower flammability or explosive limits | Lower Explosive Limit: Not Measured Upper Explosive Limit: Not Measured |
| Vapor pressure (Pa) | Not Measured |
| Vapor Density | Not Measured |
| Specific Gravity | 1.00 ± 0.02 |
| Solubility in Water | Soluble |
| Partition coefficient n-octanol/water (Log Kow) | Not Measured |
| Auto-ignition temperature | Not Measured |
| Decomposition temperature | Not Measured |
| Viscosity (cSt) | Low viscosity |

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.

10.3. Possibility of hazardous reactions

No data available.

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10.4. Conditions to avoid

Keep away from heat.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

Oxides of carbon and nitrogen.

11. Toxicological information

Acute toxicity

| Ingredient | Oral LD50, mg/kg | Skin LD50, mg/kg | Inhalation Vapor LC50, mg/L/4hr | Inhalation Dust/Mist LC50, mg/L/4hr | Inhalation Gas LC50, ppm |
|---|-----------------------------|------------------------------|---------------------------------|-------------------------------------|--------------------------|
| 1-Decanaminium, N-decyl-N,N-dimethyl-, chloride - (7173-51-5) | No data available | No data available | No data available | No data available | No data available |
| Tetrasodium EDTA - (64-02-8) | 1,000.00, Rat - Category: 4 | No data available | No data available | No data available | No data available |
| Alkyl dimethyl benzyl ammonium chloride - (Proprietary) | 344.00, Rat - Category: 4 | 645.00, Rabbit - Category: 3 | 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) | --- | Not Applicable |
| Skin corrosion/irritation | 2 | Causes skin irritation. |
| Serious eye damage/irritation | 1 | Causes serious eye damage. |
| Respiratory sensitization | --- | Not Applicable |
| Skin sensitization | --- | Not Applicable |
| Germ cell mutagenicity | --- | Not Applicable |
| Carcinogenicity | --- | Not Applicable |
| Reproductive toxicity | --- | Not Applicable |
| STOT-single exposure | --- | Not Applicable |
| STOT-repeated exposure | --- | Not Applicable |
| Aspiration hazard | --- | Not Applicable |

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12. Ecological information

12.1. Toxicity

Very toxic to aquatic life.

Toxic to aquatic life with long lasting effects.

No additional information provided for this product. 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 |
|---|-----------------------------|----------------------------|---|
| 1-Decanaminium, N-decyl-N,N-dimethyl-, chloride - (7173-51-5) | Not Available | Not Available | Not Available |
| Tetrasodium EDTA - (64-02-8) | 486.00, Lepomis macrochirus | 610.00, Daphnia magna | 100.00 (72 hr), Scenedesmus subspicatus |
| Alkyl dimethyl benzyl ammonium chloride - (Proprietary) | 0.28, Pimephales promelas | Not Available | 0.04 (72 hr), Algae |

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

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

Observe all federal, state and local regulations when disposing of this substance.

14. Transport information

| | DOT (Domestic Surface Transportation) | IMO / IMDG (Ocean Transportation) | ICAO/IATA |
|--------------------------|---------------------------------------|-----------------------------------|---------------|
| 14.1. UN number | Not Applicable | Not Regulated | Not Regulated |
| 14.2. UN proper shipping | Not Regulated | Not Regulated | Not Regulated |

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name

14.3. Transport hazard class(es) **DOT Hazard Class:** Not Applicable **IMDG:** Not Applicable **Air Class:** Not Applicable
Sub Class: Not Applicable

14.4. Packing group Not Applicable Not Applicable Not Applicable

14.5. Environmental hazards

IMDG Marine Pollutant: Yes (1-Decanamium, N-decyl-N,N-dimethyl-, chloride)

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.

FIFRA This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

DANGER

Corrosive.

Causes irreversible eye damage and skin burns.

Harmful if swallowed, inhaled or absorbed through the skin. Avoid breathing spray mist. Do not get in eyes, on skin, or on clothing.

ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish, aquatic invertebrates, oysters, and shrimp.

PHYSICAL OR CHEMICAL HAZARDS: Do not mix with oxidizers, anionic soaps and detergents. Do not use or store near heat or open flame.

Toxic Substance Control Act (TSCA) All components of this material are either listed or exempt from listing on the TSCA Inventory.

WHMIS Classification D2B E

US EPA Tier II Hazards

Fire: No

Sudden Release of Pressure: No

Reactive: No

Immediate (Acute): Yes

Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

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To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%) :

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Pennsylvania RTK Substances (>1%) :

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

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:

H226 Flammable liquid and vapor.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H350i May cause cancer if inhaled.

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.

The information and recommendations contained herein are, to the best of Pharmacal's knowledge and belief, accurate and reliable as of the date issued. Pharmacal does not warrant or guarantee their accuracy or reliability, and Pharmacal shall not be liable for any loss or damage arising out of their use thereof.

The information and recommendations are offered for the user's consideration and examination, and it is the user's responsibility to satisfy itself that they are suitable and complete for its particular use.

The hazardous materials identification system (HMIS) and national fire protection association ratings have been included by Pharmacal research laboratories INC. In order to provide additional health and hazard information. The ratings recommended are based upon criteria supplied by the developers of these rating systems, together with Pharmacal's interpretation of the available data.

End of Document

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