# SAFETY DATA SHEET

## 1. Identification

**Product identifier**
PATCO QUAT CLEAN IV

**Other means of identification**

<table>
<thead>
<tr>
<th>Product number</th>
<th>161022 / 351018 / 351036</th>
</tr>
</thead>
</table>

**Recommended use**
Sanitizer

**Recommended restrictions**
None known.

### Manufacturer/Importer/Supplier/Distributor information

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>BHC, INC.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>P.O. BOX 270 INDIANAPOLIS, IN 46206</td>
</tr>
</tbody>
</table>

**Telephone**
Phone: 317-923-3211
Fax: 317-925-4596

**Website**
www.brulin.com

**E-mail**
United States

**Emergency phone number**
CHEMTREC (24 hr): 1-800-424-9300

## 2. Hazard(s) identification

### Physical hazards

Not classified.

### Health hazards

<table>
<thead>
<tr>
<th>Acute toxicity, oral</th>
<th>Not classified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity, dermal</td>
<td>Not classified</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 1</td>
</tr>
</tbody>
</table>

### OSHA defined hazards

Not classified.

### Label elements

- **Signal word**: Danger
- **Hazard statement**: Causes serious eye damage. Causes skin irritation.
- **Precautionary statement**
  - **Prevention**: Wear safety glasses with side shields (or goggles). Wear protective gloves. Wash thoroughly after handling. Observe good industrial hygiene practices.
  - **Response**: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a poison center/doctor if you feel unwell. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.
  - **Storage**: Store locked up. Store away from incompatible materials. Do not freeze. Keep out of the reach of children.
  - **Disposal**: Dispose of waste and residues in accordance with local authority requirements.
  - **Hazard(s) not otherwise classified (HNOC)**: None known.
  - **Supplemental information**: None known.
3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>% by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALKYL (C 12-16) DIMETHYLBENZYL AMMONIUM CHLORIDE</td>
<td></td>
<td>68424-85-1</td>
<td>1 - &lt;5</td>
</tr>
<tr>
<td>Didecyldimethylammonium chloride</td>
<td></td>
<td>7173-51-5</td>
<td>1 - &lt;5</td>
</tr>
<tr>
<td>Dioctyl Dimethyl Ammonium Chloride</td>
<td></td>
<td>5538-94-3</td>
<td>1 - &lt;5</td>
</tr>
<tr>
<td>Ethyl Hydroxide</td>
<td></td>
<td>64-17-5</td>
<td>1 - &lt;5</td>
</tr>
<tr>
<td>Octyl Decyl Dimethyl Ammonium Chloride</td>
<td></td>
<td>32426-11-2</td>
<td>1 - &lt;5</td>
</tr>
</tbody>
</table>

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media None known.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up

Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Do not get this material in contact with eyes. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Keep out of the reach of children.

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

<table>
<thead>
<tr>
<th>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components</td>
<td>Type</td>
</tr>
<tr>
<td>Ethyl Hydroxide (CAS 64-17-5)</td>
<td>PEL</td>
</tr>
<tr>
<td></td>
<td>1900 mg/m3</td>
</tr>
<tr>
<td></td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>US. ACGIH Threshold Limit Values</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components</td>
<td>Type</td>
</tr>
<tr>
<td>Ethyl Hydroxide (CAS 64-17-5)</td>
<td>STEL</td>
</tr>
<tr>
<td></td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

General ventilation normally adequate. Eye wash fountain and emergency showers are recommended.

Individual protection measures, such as personal protective equipment

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

- **Skin protection**
  - Hand protection
  - Wear appropriate chemical resistant gloves.

- **Respiratory protection**
  - In case of insufficient ventilation, wear suitable respiratory equipment.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

**Appearance**

- clear

**Physical state**

- Liquid.

**Color**

- red

**Odor**

- mild amine

**Odor threshold**

- Not available.

**pH**

- 7.6

**Melting point/freezing point**

- 32 °F (0 °C)

**Initial boiling point and boiling range**

- 212 °F (100 °C)
PATCO QUAT CLEAN IV
Product number: 161022 / 351018 / 351036

Flash point
None to boiling.

Evaporation rate
Not available.

Flammability (solid, gas)
Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)
Not available.

Flammability limit - upper (%)
Not available.

Explosive limit - lower (%)
Not available.

Explosive limit - upper (%)
Not available.

Vapor pressure
Not available.

Vapor density
Not available.

Relative density
Not available.

Solubility(ies)

Solubility (water)
100 %

Partition coefficient (n-octanol/water)
Not available.

Auto-ignition temperature
Not available.

Decomposition temperature
Not available.

Viscosity
Not available.

Other information

Explosive properties
Not explosive.

Oxidizing properties
Not oxidizing.

Specific gravity
0.99

VOC
1.2 %

10. Stability and reactivity

Reactivity
The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability
Material is stable under normal conditions.

Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.

Conditions to avoid
Contact with incompatible materials.

Incompatible materials
Strong oxidizing agents.

Hazardous decomposition products
No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
Prolonged inhalation may be harmful.

Skin contact
Causes skin irritation.

Eye contact
 Causes serious eye damage.

Ingestion
Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics
Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain.

Information on toxicological effects
### Product Information

**Product number:** 161022 / 351018 / 351036

<table>
<thead>
<tr>
<th>Test Results</th>
<th>Species</th>
<th>Property</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dermal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>&gt; 100 mg/l/4h</td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>&gt; 5000 mg/kg Vapor and Mist</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Causes serious eye damage.</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td>Not a respiratory sensitizer.</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classifiable as to carcinogenicity to humans.</td>
</tr>
<tr>
<td>IARC Monographs</td>
<td>Overall Evaluation of Carcinogenicity Not listed.</td>
</tr>
<tr>
<td>US. National Toxicology Program (NTP) Report on Carcinogens</td>
<td>Not listed.</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>This product is not expected to cause reproductive or developmental effects.</td>
</tr>
<tr>
<td>Specific target organ toxicity - single exposure</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Specific target organ toxicity - repeated exposure</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not an aspiration hazard.</td>
</tr>
<tr>
<td>Chronic effects</td>
<td>Prolonged inhalation may be harmful.</td>
</tr>
</tbody>
</table>

### 12. Ecological Information

**Ecotoxicity**

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

**Persistence and degradability**

No data is available on the degradability of this product.

**Bioaccumulative potential**

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partition coefficient n-octanol / water (log Kow)</td>
<td>-0.31</td>
</tr>
<tr>
<td>Ethyl Hydroxide</td>
<td></td>
</tr>
<tr>
<td>Mobility in soil</td>
<td>No data available.</td>
</tr>
<tr>
<td>Other adverse effects</td>
<td>No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.</td>
</tr>
</tbody>
</table>

### 13. Disposal Considerations

**Disposal instructions**

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**Local disposal regulations**

Dispose in accordance with all applicable regulations.

**Hazardous waste code**

The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products
Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available or puncture and dispose in a sanitary landfill.

Contaminated packaging
Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not established.

15. Regulatory information

US federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not regulated.

CERCLA (Superfund) reportable quantity, lbs
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
No

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace
Ethyl Hydroxide (CAS 64-17-5) Low priority

FIFRA Information
This chemical is a pesticide product registered by the United States 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 (SDS), 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.

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US state regulations

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date: 12-21-2015
Revision date: 06-23-2017
Version #: 02

Disclaimer

BHC, INC. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. 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 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. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.