SAFETY DATA SHEET
Cola®Quat SME

1. Identification

Product identifier
Product name Cola®Quat SME
Product number 3789
INCI Name Soyethyl Morpholinium Ethosulfate

Recommended use of the chemical and restrictions on use
Application Surfactant
Uses advised against No specific uses advised against are identified.

Details of the supplier of the safety data sheet
Manufacturer Colonial Chemical, Inc.
225 Colonial Drive
South Pittsburg, TN 37380
U.S.A.
+1 (423) 837-8800

Emergency telephone number
Emergency telephone Toll free (in USA, Canada, Puerto Rico, Virgin Islands only):   1-800-424-9300
Direct dial:   +1 703-527-3887

2. Hazard(s) identification

Classification of the substance or mixture
Physical hazards Not Classified
Health hazards Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318

Label elements
Hazard symbols

Signal word Danger
Hazard statements H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
Cola®Quat SME

Precautionary statements

P264 Wash contaminated skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301+P312 If swallowed: Call a poison center/ doctor if you feel unwell.
P302+P352 If on skin: Wash with plenty of water.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a poison center/ doctor.
P321 Specific treatment (see medical advice on this label).
P330 Rinse mouth.
P332+P313 If skin irritation occurs: Get medical advice/ attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P501 Dispose of contents/ container in accordance with national regulations.

Contains

Onium compounds, morpholinium, 4-ethyl-4-soya alkyl, Et sulfates

Other hazards

This product does not contain any substances classified as PBT or vPvB.

3. Composition/Information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Onium compounds, morpholinium, 4-ethyl-4-soya alkyl, Et sulfates</th>
<th>30-60%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 61791-34-2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>bis(2-chloroethyl) ether</th>
<th>&lt; 100 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 111-44-4</td>
<td></td>
</tr>
</tbody>
</table>

Classification

Acute Tox. 4 - H302
Skin Irrit. 2 - H315
Eye Dam. 1 - H318
Not relevant.

The full text for all hazard statements is displayed in Section 16.

Composition comments

* The identity or exact percentage is withheld as a trade secret.

4. First-aid measures

Description of first aid measures

General information

Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.

Inhalation

Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if symptoms are severe or persist.
Cola®Quat SME

Ingestion
Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Never give anything by mouth to an unconscious person. Place unconscious person on their side in the recovery position and ensure breathing can take place. Keep affected person under observation. Get medical attention if symptoms are severe or persist.

Skin Contact
Rinse with water.

Eye contact
Rinse immediately with plenty of water. Do not rub eye. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

Protection of first aiders
First aid personnel should wear appropriate protective equipment during any rescue.

Most important symptoms and effects, both acute and delayed

General information
The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation
No specific symptoms known.

Ingestion
May cause discomfort if swallowed. Stomach pain. Nausea, vomiting.

Skin contact
Redness. Irritating to skin.

Eye contact
Causes serious eye damage. Symptoms following overexposure may include the following: Pain. Profuse watering of the eyes. Redness.

Indication of immediate medical attention and special treatment needed
Treat symptomatically.

Notes for the doctor

5. Fire-fighting measures

Extinguishing media
Suitable extinguishing media
The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture
Specific hazards
Containers can burst violently or explode when heated, due to excessive pressure build-up. This product is toxic.

Hazardous combustion products
Thermal decomposition or combustion products may include the following substances: Toxic gases or vapors.

Advice for firefighters
Protective actions during firefighting
Avoid breathing fire gases or vapors. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapors and protect men stopping the leak. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment for firefighters
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Cola®Quat SME

Personal precautions
Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Do not touch or walk into spilled material.

Environmental precautions
Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment.

Methods and material for containment and cleaning up
Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Provide adequate ventilation. Small Spillages: Collect spillage. Large Spillages: Absorb spillage with non-combustible, absorbent material. The contaminated absorbent may pose the same hazard as the spilled material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dangerous for the environment. Do not empty into drains. For waste disposal, see Section 13.

Reference to other sections
For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

7. Handling and storage

Precautions for safe handling
Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimize spills. Keep container tightly sealed when not in use. Avoid the formation of mists. Avoid discharge to the aquatic environment. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

Advice on general occupational hygiene
Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities
Store away from incompatible materials (see Section 10). Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage.

Specific end uses(s)
Miscellaneous hazardous material storage.

Specific end use(s)
The identified uses for this product are detailed in Section 1.

8. Exposure controls/Personal protection

Control parameters
Occupational exposure limits
bis(2-chloroethyl) ether
Long-term exposure limit (8-hour TWA): ACGIH 5 ppm 29 mg/m³
Short-term exposure limit (15-minute): ACGIH 10 ppm 58 mg/m³
A4, Sk
Ceiling exposure limit: OSHA 15 ppm 90 mg/m³
Sk
Cola®Quat SME

ACGIH = American Conference of Governmental Industrial Hygienists.
A4 = Not Classifiable as a Human Carcinogen.
Sk = Danger of cutaneous absorption.
OSHA = Occupational Safety and Health Administration.

bis(2-chloroethyl) ether (CAS: 111-44-4)

Immediate danger to life and health 100 ppm

Exposure controls

Protective equipment

Appropriate engineering controls
Provide adequate ventilation. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection
Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Hand protection
Wear protective gloves. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with OSHA 1910.138 and be demonstrated to be impervious to the chemical and resist degradation. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

Other skin and body protection
Wear appropriate clothing to prevent repeated or prolonged skin contact.

Hygiene measures
Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.

Respiratory protection
Ensure all respiratory protective equipment is suitable for its intended use and is NIOSH approved. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with OSHA 1910.134. Full face mask respirators with replaceable filter cartridges should comply with OSHA 1910.134. Half mask and quarter mask respirators with replaceable filter cartridges should comply with OSHA 1910.134.

Environmental exposure controls
Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid.</td>
</tr>
<tr>
<td>Color</td>
<td>Amber.</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic.</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH (as is):</td>
<td>7 - 8</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not available.</td>
</tr>
</tbody>
</table>
### Cola®Quat SME

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial boiling point and range</td>
<td>$&gt;100^\circ C$</td>
</tr>
<tr>
<td>Flash point</td>
<td>$&gt; 300^\circ C$ Pensky-Martens closed cup.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative density</td>
<td>$1.01 @ 25^\circ C$</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Dispersible in water.</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>Not available.</td>
</tr>
<tr>
<td>Auto-Ignition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Volatility</td>
<td>65% by vol.</td>
</tr>
<tr>
<td>Surface Tension</td>
<td></td>
</tr>
<tr>
<td>% Solids</td>
<td></td>
</tr>
</tbody>
</table>

### 10. Stability and reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity</td>
<td>See the other subsections of this section for further details.</td>
</tr>
<tr>
<td>Stability</td>
<td>Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>No potentially hazardous reactions known.</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>There are no known conditions that are likely to result in a hazardous situation.</td>
</tr>
<tr>
<td>Materials to avoid</td>
<td>No specific material or group of materials is likely to react with the product to produce a hazardous situation.</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Toxic gases or vapors.</td>
</tr>
</tbody>
</table>

### 11. Toxicological information

#### Information on toxicological effects

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - oral</td>
<td></td>
</tr>
<tr>
<td>Notes (oral LD₅₀)</td>
<td>Acute Tox. 4 - H302 Harmful if swallowed.</td>
</tr>
<tr>
<td>ATE oral (mg/kg)</td>
<td>1,002.0</td>
</tr>
</tbody>
</table>
**Cola®Quat SME**

### Acute toxicity - dermal
**Notes (dermal LD₅₀)** Based on available data the classification criteria are not met.

### Acute toxicity - inhalation
**Notes (inhalation LC₅₀)** Based on available data the classification criteria are not met.

### Skin corrosion/irritation
**Skin corrosion/irritation** Irritating to skin.

### Serious eye damage/irritation
**Serious eye damage/irritation** Eye Dam. 1 - H318 Causes serious eye damage.

### Respiratory sensitization
**Respiratory sensitization** Based on available data the classification criteria are not met.

### Skin sensitization
**Skin sensitization** Based on available data the classification criteria are not met.

### Germ cell mutagenicity
**Genotoxicity - in vitro** Based on available data the classification criteria are not met.

### Carcinogenicity
**Carcinogenicity** Based on available data the classification criteria are not met.

### IARC carcinogenicity
**IARC carcinogenicity** Contains a substance which has been shown to cause cancer in laboratory animals. IARC Group 2A Probably carcinogenic to humans.

### Reproductive toxicity
**Reproductive toxicity - fertility** Based on available data the classification criteria are not met.

### Reproductive toxicity - development
**Reproductive toxicity - development** Based on available data the classification criteria are not met.

### Specific target organ toxicity - single exposure
**STOT - single exposure** Not classified as a specific target organ toxicant after a single exposure.

### Specific target organ toxicity - repeated exposure
**STOT - repeated exposure** Not classified as a specific target organ toxicant after repeated exposure.

### Aspiration hazard
**Aspiration hazard** Based on available data the classification criteria are not met.

### General information
**General information** The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

### Inhalation
**Inhalation** No specific symptoms known.

### Ingestion
**Ingestion** May cause discomfort if swallowed. Stomach pain. Nausea, vomiting.

### Skin Contact
**Skin Contact** Redness. Irritating to skin.

### Eye contact
**Eye contact** Causes serious eye damage. Symptoms following overexposure may include the following: Pain. Profuse watering of the eyes. Redness.

### Route of exposure
**Route of exposure** Ingestion Inhalation Skin and/or eye contact

### Target Organs
**Target Organs** No specific target organs known.

12. Ecological information
Cola®Quat SME

Ecotoxicity
Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

Toxicity
Aquatic Acute 1 - H400 Very toxic to aquatic life. Aquatic Chronic 1 - H410 Very toxic to aquatic life with long lasting effects.

Persistence and degradability
Biodegradation
The product is readily biodegradable. This product meets the criteria for a surfactant under the EU Detergents Regulation (EC) 648/2004.

Bioaccumulative potential
Bio-Accumulative Potential
No data available on bioaccumulation.

Partition coefficient
Not available.

Mobility in soil

Mobility
No data available.

13. Disposal considerations

Waste treatment methods
General information
The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

Disposal methods
Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labeled with their contents. Incineration or landfill should only be considered when recycling is not feasible.

14. Transport information

General
For limited quantity packaging/limited load information, consult the relevant modal documentation using the data shown in this section.

UN Number
UN No. (TDG) 3082
UN No. (IMDG) 3082
UN No. (ICAO) 3082
UN No. (DOT) UN3082

UN proper shipping name
Proper shipping name (TDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS Onium compounds, morpholinium, 4-ethyl-4-soya alkyl, Et sulfates)
Proper shipping name (IMDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS Onium compounds, morpholinium, 4-ethyl-4-soya alkyl, Et sulfates)
Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS Onium compounds, morpholinium, 4-ethyl-4-soya alkyl, Et sulfates)
Cola®Quat SME

Proper shipping name (DOT)
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS Onium compounds, morpholinium, 4-ethyl-4-soya alkyl, Et sulfates)

Transport hazard class(es)
DOT hazard class
9
DOT hazard label
9
TDG class
9
TDG label(s)
9
IMDG Class
9
ICAO class/division
9

Transport labels

DOT transport labels

Packing group
TDG Packing Group
III
IMDG packing group
III
ICAO packing group
III
DOT packing group
III

Environmental hazards
Environmentally Hazardous Substance

Special precautions for user
Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

EmS
F-A, S-F

DOT reportable quantity
RQ: Dichloroethyl ether (1000000 lbs), RQ: Diethyl sulfate (1000000 lbs)

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

15. Regulatory information

US Federal Regulations
SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities
The following ingredients are listed or exempt:
Cola®Quat SME

*bis(2-chloroethyl) ether*

EPCRA 302 TPQ 10000 lbs Tier II TPQ 500 lbs

**CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)**
The following ingredients are listed or exempt:

*bis(2-chloroethyl) ether*

Final CERCLA RQ: 10(4.54) pounds (Kilograms)

*Diethyl Sulfate*

Final CERCLA RQ: 10(4.54) pounds (Kilograms)

**SARA Extremely Hazardous Substances EPCRA Reportable Quantities**

None of the ingredients are listed or exempt.

**SARA 313 Emission Reporting**
The following ingredients are listed or exempt:

*bis(2-chloroethyl) ether*  
1.0 %

*Diethyl Sulfate*  
0.1 %

**CAA Accidental Release Prevention**

None of the ingredients are listed or exempt.

**FDA - Essential Chemical**

None of the ingredients are listed or exempt.

**FDA - Precursor Chemical**

None of the ingredients are listed or exempt.

**SARA (311/312) Hazard Categories**

None of the ingredients are listed or exempt.

**OSHA Highly Hazardous Chemicals**

None of the ingredients are listed or exempt.

**US State Regulations**

**California Proposition 65 Carcinogens and Reproductive Toxins**
The following ingredients are listed or exempt:

*bis(2-chloroethyl) ether*  
Carcinogen.

*Diethyl Sulfate*  
Carcinogen.

**California Air Toxics "Hot Spots" (A-I)**
The following ingredients are listed or exempt:

*bis(2-chloroethyl) ether*  

*Diethyl Sulfate*  

**California Air Toxics "Hot Spots" (A-II)**

None of the ingredients are listed or exempt.

**California Directors List of Hazardous Substances**
The following ingredients are listed or exempt:
Cola®Quat SME

bis(2-chloroethyl) ether
Diethyl Sulfate

Massachusetts "Right To Know" List
The following ingredients are listed or exempt:

bis(2-chloroethyl) ether
Diethyl Sulfate

Rhode Island "Right To Know" List
The following ingredients are listed or exempt:

bis(2-chloroethyl) ether
Diethyl Sulfate

Minnesota "Right To Know" List
The following ingredients are listed or exempt:

bis(2-chloroethyl) ether
Diethyl Sulfate

New Jersey "Right To Know" List
The following ingredients are listed or exempt:

bis(2-chloroethyl) ether
Diethyl Sulfate

Pennsylvania "Right To Know" List
The following ingredients are listed or exempt:

bis(2-chloroethyl) ether
Diethyl Sulfate

Inventories
EU - REACH
Registered - 01-2120763656-43-XXXX

Canada - DSL/NDSL
All the ingredients are listed or exempt.

US - TSCA
All the ingredients are listed or exempt.

US - TSCA 12(b) Export Notification
None of the ingredients are listed or exempt.

Australia - AICS
All the ingredients are listed or exempt.

Japan - ENCS
Not determined

Korea - KECI
All the ingredients are listed or exempt.

China - IECSC
All the ingredients are listed or exempt.
Cola®Quat SME

China - IECIC
Listed as Soyethyl Morpholinium Ethosulfate

Philippines - PICCS
All the ingredients are listed or exempt.

New Zealand - NZIOC
All the ingredients are listed or exempt.

Taiwan - NECI
All the ingredients are listed or exempt.

16. Other information

<table>
<thead>
<tr>
<th>Classification abbreviations and acronyms</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. = Acute toxicity</td>
<td></td>
</tr>
<tr>
<td>Eye Dam. = Serious eye damage</td>
<td></td>
</tr>
<tr>
<td>Skin Irrit. = Skin irritation</td>
<td></td>
</tr>
<tr>
<td>Aquatic Acute = Hazardous to the aquatic environment (acute)</td>
<td></td>
</tr>
<tr>
<td>Aquatic Chronic = Hazardous to the aquatic environment (chronic)</td>
<td></td>
</tr>
</tbody>
</table>

Training advice
Only trained personnel should use this material.

Issued by
Regulatory Affairs Department

Revision date
4/25/2019

Revision
9

Supersedes date
2/1/2019

SDS No.
5118

Hazard statements in full
H300 Fatal if swallowed.
H302 Harmful if swallowed.
H310 Fatal in contact with skin.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H330 Fatal if inhaled.
H351 Suspected of causing cancer.

End of SDS

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.