1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name
Clorox Commercial Solutions® Formula 409® Cleaner Degreaser Disinfectant

Other means of identification

EPA Registration Number 67619-10

Recommended use of the chemical and restrictions on use

Recommended Use General purpose cleaner, degreaser, and disinfectant

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address
Clorox Professional Products Company
1221 Broadway
Oakland, CA 94612

Phone: 1-510-271-7000

Emergency telephone number

Emergency Phone Numbers
For Medical Emergencies call: 1-800-446-1014
For Transportation Emergencies, call Chemtrec: 1-800-424-9300
2. HAZARDS IDENTIFICATION

Classification

This mixture is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Skin corrosion/irritation Category 3

GHS Label elements, including precautionary statements

Emergency Overview

<table>
<thead>
<tr>
<th>Signal word</th>
<th>Warning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard statements</td>
<td>Causes mild skin irritation</td>
</tr>
</tbody>
</table>

No pictogram required.

Appearance Clear | Physical State Thin liquid | Odor Floral, citrus

Precautionary Statements - Prevention

None

Precautionary Statements - Response

If skin irritation occurs: Get medical advice.

Precautionary Statements - Storage

None

Precautionary Statements - Disposal

None

Hazards not otherwise classified (HNOC)

Not applicable

Unknown Toxicity

0.2% of the mixture consists of ingredient(s) of unknown toxicity

Other information

Very toxic to aquatic life with long-lasting effects.

Interactions with Other Chemicals

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lauramine oxide</td>
<td>1643-20-5</td>
<td>0.5 - 1.5</td>
<td>*</td>
</tr>
<tr>
<td>n-Alkyl (40% C12, 50% C14, 10% C16) dimethyl benzyl ammonium chloride</td>
<td>68424-85-1</td>
<td>0.2 - 0.4</td>
<td>*</td>
</tr>
</tbody>
</table>

* The exact percentage (concentration) of composition has been withheld as a trade secret
4. FIRST AID MEASURES

First aid measures

General Advice  
Show this safety data sheet to the doctor in attendance.

Eye Contact  
Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin Contact  
Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Inhalation  
Move to fresh air. If breathing is affected, call a doctor.

Ingestion  
Call a poison control center or doctor immediately for treatment advice. Have person sip a glassful of water if able to swallow. DO NOT induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms/Effects  
Mild irritation of eyes and skin.

Indication of any immediate medical attention and special treatment needed

Notes to Physician  
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media  
CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical  
No information available

Explosion Data

Sensitivity to Mechanical Impact  
None

Sensitivity to Static Discharge  
None

Protective Equipment and Precautions 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
Avoid contact with eyes and skin.

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

Environmental precautions

Environmental Precautions
See Section 12 for additional ecological Information

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
Absorb and containerize. Wash residual down to sanitary sewer. Contact the sanitary treatment facility in advance to assure ability to process washed-down material.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling
Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes, skin, and clothing. Do not eat, drink, or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage
Keep containers tightly closed in a dry, cool, and well-ventilated place.

Incompatible Products
None known.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lauramine oxide 1643-20-5</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>n-Alkyl (40% C12, 50% C14, 10% C16) dimethyl benzyl ammonium chloride 68424-85-1</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Appropriate engineering controls

Engineering Measures
Showers
Eyewash stations
Ventilation systems
Individual protection measures, such as personal protective equipment

Eye/Face Protection
If splashes are likely to occur, wear safety glasses with side-shields. None required for consumer use.

Skin and Body Protection
No special protective equipment required.

Respiratory Protection
If irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures
Remove and wash contaminated clothing before re-use. Avoid contact with skin, eyes, or clothing. Do not eat, drink, or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Physical and Chemical Properties</th>
<th>Property</th>
<th>Values</th>
<th>Remarks/ Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Thin liquid</td>
<td></td>
<td>No information available</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear</td>
<td>Odor</td>
<td>Floral, citrus</td>
</tr>
<tr>
<td>Color</td>
<td>Ergct</td>
<td>Odor Threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>9 - 11.5</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
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<td>None known</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>~1.0</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Soluble in water</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not explosive</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
</tbody>
</table>

Other Information
- Softening Point: No data available
- VOC Content (%): No data available
- Particle Size: No data available
- Particle Size Distribution: No data available
10. STABILITY AND REACTIVITY

Reactivity
No data available.

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to avoid
None known.

Incompatible materials
None known.

Hazardous Decomposition Products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation
Exposure to vapor or mist may irritate respiratory tract.

Eye Contact
May cause eye irritation.

Skin Contact
Prolonged contact may cause irritation.

Ingestion
Ingestion may cause irritation to mucous membranes and gastrointestinal irritation, nausea, vomiting, and diarrhea.

Information on toxicological effects

Symptoms
May cause redness and tearing of the eyes and skin redness.

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

Sensitization
No information available.

Mutagenic Effects
No information available.

Carcinogenicity
Contains no ingredient listed as a carcinogen.

Reproductive Toxicity
No information available

STOT - single exposure
No information available.

STOT - repeated exposure
No information available.

Chronic Toxicity
No known effect.

Target Organ Effects
Respiratory system, eyes, skin, gastrointestinal tract (GI).

Aspiration Hazard
No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document
Not applicable.
12. ECOLOGICAL INFORMATION

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

**Persistence and Degradability**
No information available.

**Bioaccumulation**
No information available.

**Other Adverse Effects**
No information available.

13. DISPOSAL CONSIDERATIONS

**Disposal methods**
Dispose of in accordance with all applicable federal, state, and local regulations.

**Contaminated Packaging**
Do not reuse empty containers. Dispose of in accordance with all applicable federal, state, and local regulations.

14. TRANSPORT INFORMATION

**DOT**
Not regulated

**TDG**
Not regulated

**ICAO**
Not regulated

**IATA**
Not regulated

**IMDG/IMO**
Not regulated

15. REGULATORY INFORMATION

**Chemical Inventories**

**TSCA**
All components of this product are either on the TSCA 8(b) Inventory or otherwise exempt from listing.

**DSL/NDSL**
All components are on the DSL or NDSL.

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**U.S. Federal Regulations**

**SARA 313**
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Sudden Release of Pressure Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>
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, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

EPA Statement
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:

CAUTION: Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling. Avoid contact with foods.

U.S. State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
<th>Rhode Island</th>
<th>Illinois</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanolamine</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
</tr>
</tbody>
</table>

International Regulations

Canada
WHMIS Hazard Class
D2B Toxic Materials
### 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Hazards</th>
<th>HMIS</th>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Physical Hazard</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>B</td>
</tr>
</tbody>
</table>

**Prepared By**  
Product Stewardship  
23 British American Blvd.  
Latham, NY 12110  
1-800-572-6501

**Preparation/Revision Date**  
Jcpwct{ 7, 2017

**Revision Date**  
Lwpq" : "4239

**Revision Note**  
W f cgf "q"tgqo xqg"t tgpp"t { g0

**Reference**  
1050911/166962.001

**General 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**