SAFETY DATA SHEET

Section 1 - Identification

Product Identifier: FORTRESS Spray Disinfectant Deodorant
Other means of identification: 2004
Recommended use: Spray Disinfectant Deodorant
Recommended restrictions: EPA Registered Product. For Commercial and Industrial Use Only. (RTU) Ready-To-Use aerosol.

Manufacturer / Importer / Supplier / Distributor Information
Company Name: National Chemical Laboratories of PA, Inc.
Address: 401 N. 10th Street - Philadelphia, PA 19123
Telephone: 1 (215) 922-1200
Supplier Email: info@nclonline.com
Contact: CHEM-TEL
Emergency Phone: 1 (800) 255-3924

Section 2 - Hazard(s) Identification

SDS Hazards and Warnings are based on the undiluted product. Refer to diluted SDS for Ready-To-Use Hazards and Warnings.

Physical Hazards
- Flammable Aerosols: 2
- Gasses under pressure: Liquefied gas

Health Hazards
- Acute toxicity, oral: 5
- Serious eye damage/eye irritation: 2B
- Skin corrosion/irritation: 3
- Specific target organ toxicity, single exposure: 3

OSHA defined hazards
- Not classified (HNOC)

Label Elements

Hazard Symbol

Signal Word: Warning

Hazard Statement
- Flammable aerosol. Contains gas under pressure; may explode if heated. May be harmful if swallowed. Causes eye irritation. Causes mild skin irritation. May be harmful if inhaled.

Precautionary statement

Prevention
- Keep away from heat/sparks/open flames/hot surfaces. No smoking. Avoid breathing mist or vapor. Use only outdoors or in a well-ventilated area. Wear eye/face protection. Wash thoroughly after handling. Keep out of reach of children.

Response
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Storage
- Protect from sunlight. Do not expose to temperatures exceeding 122°F/50°C. Store in a well-ventilated place.

Disposal
- Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC)
- None known.

Section 3 - Composition/Information on ingredients

Mixture

Hazardous Components
- Ingredient Name
- Butane: 106-97-8
- Ethyl Alcohol: 64-17-5
- Propane: 74-98-6
- _Alkyl Dimethyl Benzyl Ammonium Chloride (C12-C18): 68391-01-5
- _Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chloride (Alternate CAS 68956-79-6): 85409-23-0

Composition Comments
- Components not listed are either non-hazardous or are below reportable limits.
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Section 4 - First-aid Measures

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

Skin contact
Wash off with soap and water. Get medical attention if irritation develops and persists.

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 if irritation develops and persists.

Ingestion
Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low to avoid getting into the lungs. Call a poison control center if large amounts are ingested. Never give anything by mouth to an unconscious person.

Most Important symptoms/effects, acute and delayed
Eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Indication of immediate medical attention and special treatment
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.

Section 5 - Fire-fighting measures

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

Unsuitable extinguishing media
None known.

Specific hazards arising from the chemical
Contents under pressure. Containers may explode when heated.

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
In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific Methods
Use standard fire fighting procedures and consider the hazards of other involved materials.

Section 6 - Accidental release measures

Personal precautions, protective equipment and emergency procedures.
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up
Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

Environmental precautions
Avoid discharge into drains, water courses or onto the ground.

Section 7 - Handling and storage

Precautions for safe handling
HARMFUL IF INHALED OR SWALLOWED. VAPOR HARMFUL. CAUSES SEVERE EYE AND SKIN DAMAGE. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Do not re-use empty containers. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Do not eat, drink or smoke when using this product. Keep out of reach of children. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities
Level 1 Aerosol. Contents under pressure. Do not expose to heat or store at temperatures above 122°F/50°C as can may burst. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

Section 8 - Exposure control/personal protection

Occupational exposure limits
US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane (CAS 106-97-8)</td>
<td>TWA</td>
<td>1000 ppm</td>
<td></td>
</tr>
<tr>
<td>Ethyl Alcohol (CAS 64-17-5)</td>
<td>TWA</td>
<td>1900 mg/m³, 1000 ppm</td>
<td></td>
</tr>
<tr>
<td>Propane (CAS 74-98-6)</td>
<td>PEL</td>
<td>1800 mg/m³, 1000 ppm</td>
<td></td>
</tr>
<tr>
<td>Propane (CAS 74-98-6)</td>
<td>TWA</td>
<td>1000 ppm</td>
<td></td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values


General hygiene considerations
When using do not smoke. 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.

Biological limit values
No biological exposure limits noted for the ingredient(s).

Exposure guidelines
Use personal protective equipment as required. Keep working clothes separately.

Respiratory protection
If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

Individual protection measures, such as personal protective equipment
Eye/face protection
Wear eye/face protection.

Skin protection
Hand protection
Wear suitable protective clothing.

Other
If conditions risk exposure, wear suitable protective clothing.

Respiratory protection
If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations
When using do not smoke. 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.

Section 9 - Physical and chemical properties

Appearance
Gas/Liquid mixture.

Form

Color
Pale Straw.

Odor
Morning Fresh (Floral)

Odor threshold
Not available.

pH
11.0 - 12.0

Melting point/freezing point
Not available.

Initial boiling point and boiling range
Not available.

Flash point
-156.0 °F (-104.4 °C) Propellant estimated

Evaporation rate
Not available.

Flammability (solid, gas)
Not available.

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
1.00 ± 0.01 @ (75°F) (liquid)

Relative density temperature
75 °F (23.9 °C)

Solubilities (water)
Soluble. (liquid)

Partition Coefficient n-octanol/water
Not available.

Auto-ignition temperature
Not available.

Decomposition temperature
Not available.

Viscosity
<10 cSt.

Viscosity Temperature
75 °F (23.9 °C)
Section 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**: Hazardous polymerization does not occur.
- **Conditions to Avoid**: Avoid heat, sparks, open flames and other ignition sources. Temperatures above 122°F/50°C. Contact with incompatible materials.
- **Incompatible materials**: Strong oxidizing agents.
- **Hazardous Decomposition Products**: Combustion will produce carbon dioxide and, possibly toxic chemicals such as carbon monoxide.

Section 11 - Toxicological information

### Information on likely routes of exposure

- **Ingestion**: May be harmful if swallowed.
- **Inhalation**: May cause respiratory tract irritation. This product may be aspirated onto the lungs and cause chemical pneumonitis.
- **Skin contact**: Causes skin irritation. Prolonged or repeated skin contact may cause drying, cracking, or irritation.
- **Eye contact**: Causes eye irritation.

#### Symptoms related to the physical, chemical and toxicological characteristics

Eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

### Information on toxicological effects

#### Acute toxicity

<table>
<thead>
<tr>
<th>Components</th>
<th>Level</th>
<th>Type</th>
<th>Code</th>
<th>Species</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chloride (Alternate CAS 68956-79-6) (CAS 85409-23-0)</em></td>
<td>Acute</td>
<td>Dermal</td>
<td>LD50</td>
<td>Rabbit</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td><em>Alkyl Dimethyl Benzyl Ammonium Chloride (C12-C18) (CAS 68391-01-5)</em></td>
<td>Acute</td>
<td>Inhalation</td>
<td>LC50</td>
<td>Rabbit</td>
<td>&gt; 20 mg/l</td>
</tr>
<tr>
<td>Butane (CAS 106-97-8)</td>
<td>Acute</td>
<td>Dermal</td>
<td>LD50</td>
<td>Rat</td>
<td>1420 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Acute</td>
<td>Inhalation</td>
<td>LC50</td>
<td>Rat</td>
<td>&gt; 20 mg/l</td>
</tr>
<tr>
<td></td>
<td>Acute</td>
<td>Oral</td>
<td>LD50</td>
<td>Rat</td>
<td>500 - 5000 mg/kg</td>
</tr>
<tr>
<td>Ethyl Alcohol (CAS 64-17-5)</td>
<td>Acute</td>
<td>Inhalation</td>
<td>LC50</td>
<td>Rat</td>
<td>117 - 125 mg/l, 4 h</td>
</tr>
<tr>
<td>Propane (CAS 74-98-6)</td>
<td>Acute</td>
<td>Inhalation</td>
<td>LC50</td>
<td>Rat</td>
<td>10470 mg/kg</td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**: Prolonged skin contact may cause temporary irritation.

**Serious eye damage/ eye irritation**: Causes eye irritation.

**Respiratory sensitization**: This product is not expected to cause respiratory sensitization.

**Skin sensitization**: This product is not expected to cause skin sensitization.

**Germ cell mutagenicity**: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**: This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

**Reproductive toxicity**: This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure**: May cause drowsiness and dizziness.

**Specific target organ toxicity - repeated exposure**: Not classified.

**Aspiration hazard**: Not likely, due to the form of the product.

**Chronic effects**: Prolonged inhalation may be harmful. May be harmful if absorbed through skin.
Section 12 - Ecological Information

Ecotoxicity
May cause long-term adverse effects in the aquatic environment.

Persistence and degradability
No data is available on the degradability of this product.

Bioaccumulative potential
No data available.

Partition coefficient n-octanol / water log (Kow)

<table>
<thead>
<tr>
<th>Components</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol (CAS 64-17-5)</td>
<td>-0.31</td>
</tr>
<tr>
<td>Butane (CAS 106-97-8)</td>
<td>2.89</td>
</tr>
<tr>
<td>Propane (CAS 74-98-6)</td>
<td>2.36</td>
</tr>
</tbody>
</table>

Mobility in soil
No data available.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

Section 13 - Disposal considerations

Disposal instructions
Consult authorities before disposal. Contents under pressure. Do not puncture, incinerate or crush. Dispose of contents/container in accordance with local/regional/national/international regulations. PESTICIDE DISPOSAL - Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinseate 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
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

Contaminated packaging
Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

Section 14 - Transport information

DOT
UN number UN1950
Proper shipping name Aerosols, flammable
Transport hazard class(es) 2.1
Packing group Not Applicable.
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Labels required None/Ninguno
Special provisions N82
Packaging exemption 306
Packaging non bulk None/Ninguno
Packaging bulk None/Ninguno
Comment This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

IATA
UN number UN1950
UN proper shipping name Aerosols, flammable
Transport hazard class(es) 2.1
Packing group Not Applicable.
Environmental hazards No
Labels required 2.1
ERG Code 10L
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Other Information
Passenger and Cargo aircraft Allowed.
Cargo aircraft only Allowed.
Packaging Exceptions LTD QTY

IMDG
UN number UN1950
UN proper shipping name AEROSOLS
**SAFETY DATA SHEET**

**Transport hazard class(es)**  2.1  
**Packaging group**  Not Applicable.  
**Environmental hazards**  Marine pollutant  
**Labels required**  None  
**EmS**  F-D, S-U  
**Special precautions for user**  Read safety instructions, SDS and emergency procedures before handling.  
**Packaging Exceptions**  LTD QTY  
**Transportation in bulk according to Annex II of MARPOL 73/78 and IBC Code**  Not applicable.  
**General Information**  IMDG Regulated Marine Pollutant

### Section 15 - Regulatory Information

**US federal regulations**  This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.  
**TSCA Section 12(b) Export Notification (40 CFR707, Subpt. D)**  
**CERCLA Hazardous Substance List (40 CFR 302.4)**  
<table>
<thead>
<tr>
<th>Components</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol (CAS 64-17-5)</td>
<td>LISTED</td>
</tr>
</tbody>
</table>
**Superfund Amendments and Reauthorization Act of 1986 (SARA)**  
**Hazard Categories**  
| Immediate Hazard | Yes |
| Delayed Hazard | No |
| Fire Hazard | Yes |
| Pressure Hazard | Yes |
| Reactivity Hazard | No |
**SARA 302 Extremely hazardous substance**  
Not regulated.  
**SARA 311/312 Hazardous chemical**  
No  
**SARA 313 (TRI reporting)**  
Not regulated.  
**Other federal regulations**  
**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HSPs) 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.  
**Food and Drug Administration (FDA)**  
Not regulated.  
**US state regulations**  
**US.Massachusetts RTK - Substance List**  
- Ethyl Alcohol (CAS 64-17-5)  
- Butane (CAS 106-97-8)  
- Propane (CAS 74-98-6)  
**US.New Jersey Worker and Community Right-to-Know Act**  
**US.Pennsylvania RTK - Hazardous Substances**  
- Ethyl Alcohol (CAS 64-17-5)  
- Butane (CAS 106-97-8)  
- Propane (CAS 74-98-6)  
**US.Rhode Island RTK**  
**US - California Proposition 65**  
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.

### 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>No</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>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
</tbody>
</table>
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Japan  Inventory of Existing and New Chemical Substances (ENCS)  No
Korea  Existing Chemicals List (ECL)  No
New Zealand  New Zealand Inventory  No
Philippines  Philippine Inventory of Chemicals and Chemical Substances  No
United States  Puerto Rico  Toxic Substances Control Act (TSCA) Inventory  No

*A “Yes” indicates this product complies 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).

Section 16 - Other information, including date of preparation or last version

| Issue date | 12/3/2018 |
| Version # | 01 |
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