


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.

	Classification	Category
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.	
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	CAS #	%
	Butane	106-97-8	6 - 12
	Ethyl Alcohol	64-17-5	35 - 40
	Propane	74-98-6	3 - 6
	_Alkyl Dimethyl Benzyl Ammonium Chloride (C12-C18)	68391-01-5	< 0.1
	_Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chloride (Alternate CAS 68956-79-6)	85409-23-0	< 0.1
Composition Comments	Components not listed are either non-hazardous or are below reportable limits.		

Section 4 - First-aid Measures

SAFETY DATA SHEET

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)			
Components	Type	Value	Form
Butane (CAS 106-97-8)	TWA	1000 ppm	
Ethyl Alcohol (CAS 64-17-5)	TWA	1900 mg/m ³ , 1000 ppm	
Propane (CAS 74-98-6)	PEL	1800 mg/m ³ , 1000 ppm	
Propane (CAS 74-98-6)	TWA	1000 ppm	
US. ACGIH Threshold Limit Values			
Component	Type	Value	Form
Ethyl Alcohol (CAS 64-17-5)	STEL	1000 ppm	

SAFETY DATA SHEET

Butane (CAS 106-97-8)	TLV	1000 ppm
Butane (CAS 106-97-8)	STEL	1000 ppm
Propane (CAS 74-98-6)	TLV	1000 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Butane (CAS 106-97-8)	TWA	1900 mg/m ³ , 800 ppm
Ethyl Alcohol (CAS 64-17-5)	IDLH	3300 ppm
Ethyl Alcohol (CAS 64-17-5)	TWA	1900 mg/m ³ , 1000 ppm
Propane (CAS 74-98-6)	TWA	1800 mg/m ³ , 1000 ppm

Biological limit values	No biological exposure limits noted for the ingredient(s).
Exposure guidelines	Use personal protective equipment as required. Keep working clothes separately.
Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.
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	
Physical state	Gas/Liquid mixture.
Form	Aerosol. Liquefied gas. Clear liquid.
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)
Other Information	
VOC's	30 - 40 %
Pressure	40 - 52 psig @ 70F

SAFETY DATA SHEET

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

May be harmful if swallowed.

Components	Level	Type	Code	Species	Results
_Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chloride (Alternate CAS 68956-79-6) (CAS 85409-23-0)	Acute	Dermal	LD50	Rabbit	> 2000 mg/kg
	Acute	Inhalation	LC50		> 20 mg/l
_Alkyl Dimethyl Benzyl Ammonium Chloride (C12-C18) (CAS 68391-01-5)	Acute	Dermal	LD50	Rabbit	> 2000 mg/kg
	Acute	Dermal	LD50	Rat	1420 mg/kg
	Acute	Inhalation	LC50		> 20 mg/l
	Acute	Oral	LD50	Rat	500 - 5000 mg/kg
Butane (CAS 106-97-8)	Acute	Inhalation	LC50	Mouse	52%, 120 minutes
	Acute	Inhalation	LC50	Mouse	1237 mg/l, 120 Minutes
	Acute	Inhalation	LC50	Rat	1355 mg/l
Ethyl Alcohol (CAS 64-17-5)	Acute	Dermal	LD50	Rabbit	>2000 mg/kg
	Acute	Dermal	LD50	Rat	10470 mg/kg
	Acute	Inhalation	LC50	Rat	117 - 125 mg/l, 4 h
	Acute	Oral	LD50	Rat	2000 mg/kg
Propane (CAS 74-98-6)	Acute	Inhalation	LC50	Mouse	52%, 120 minutes
	Acute	Inhalation	LC50	Mouse	1237 mg/l, 120 Minutes
	Acute	Inhalation	LC50	Rat	1355 mg/l 658mg/l/4h

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.

SAFETY DATA SHEET

Partition coefficient n-octanol / water log (Kow)

Components	Results
Ethyl Alcohol (CAS 64-17-5)	-0.31
Butane (CAS 106-97-8)	2.89
Propane (CAS 74-98-6)	2.36

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 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

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
Packaging 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
Transport hazard class(es)	2.1
Packaging group	Not Applicable.
Environmental hazards	No
Marine pollutant	
Labels required	None

SAFETY DATA SHEET

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)

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Components

Result

Ethyl Alcohol (CAS 64-17-5)

LISTED

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 ~~Not regulated.~~

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 ~~Not regulated.~~

Ethyl Alcohol (CAS 64-17-5)

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

US.Pennsylvania RTK - Hazardous Substances ~~Not regulated.~~

Ethyl Alcohol (CAS 64-17-5)

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

US.Rhode Island RTK ~~Not regulated.~~

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

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

Country(s) or region	Inventory Name	On Inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
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
Unites States Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

SAFETY DATA SHEET

*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

Revision date 1/17/2021

Version # 01

HMIS Hazard Codes

PPE A

Disclaimer

The information contained herein was obtained from current and reliable sources. However, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond the manufacturer's control, it is the user's responsibility both to determine safe conditions for use of this product and to assume liability for loss, injury, damage or expense arising from the product's improper use. No warranty, expressed or implied, regarding the product described herein shall be created by or inferred from any statement or omission in this SDS. Various government agencies may have specific regulations concerning the transportation, handling, storage, use or disposal of this product which may not be reflected in this SDS. The user should review these regulations to ensure full compliance.