



World Class Cleaning & Hygiene Solutions™

NATIONAL CHEMICAL LABORATORIES, INC.

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

	Classification	Category	
Physical Hazards	Gases Under Pressure, Compressed Gas		
	Aerosols	1	
Health Hazards	Aspiration hazard	1	
	Eye Irritation	2A	
	Specific target organ toxicity, repeated exposure	2	
	Specific target organ toxicity, single exposure	3	TARGET ORGAN: respiratory tract irritation
	Specific target organ toxicity, single exposure	3	narcotic effects
OSHA defined hazards	Not Classified.		
Label Elements			
Hazard Symbol			
Signal Word	Warning		
Hazard Statement	Extremely flammable aerosol. Contains gas under pressure; may explode if heated. May be fatal if swallowed and enters airways.. Causes serious eye irritation. Causes skin irritation. May cause damage to organs through prolonged or repeated exposure. May cause drowsiness or dizziness. May cause respiratory irritation.		
Precautionary statement			
Prevention	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Wash hand thoroughly after handling. Wear protective gloves, eye protection, and face protection. Do not breathe mist, vapors or spray. Use only outdoors or in a well-ventilated area. Keep out of reach of children.		
Response	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do not induce vomiting. 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. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical attention. Take of contaminated clothing and wash it before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.		
Storage	Protect from sunlight. Do not expose to temperatures exceeding 122°F/50°C. Store in a well-ventilated place. Store locked up.		
Disposal	Dispose of waste and residues in accordance with local, regional, national and international regulations.		
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

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N-Alkyl Dimethyl Ethyl Benzyl Ammonium Chloride	68956-79-6	< 0.1
_Alkyl Dimethyl Benzyl Ammonium Chloride (C12-C18)	68391-01-5	< 0.1

Composition Comments Components not listed are either non-hazardous or are below reportable limits.

Section 4 - First-aid Measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.
Skin contact	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash 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 if irritation develops and persists.
Ingestion	Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.
General Information	DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. Please refer to the SDS for additional information. Keep out of reach of children. Keep upright in a cool, dry place. Do not discard empty can in trash compactor.

Section 5 - Fire-fighting measures

Suitable extinguishing media	Use extinguishing media suitable for surrounding fire.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	Extremely flammable aerosol. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. In fire, will decompose to carbon dioxide, carbon monoxide
Special protective equipment and precautions for firefighters	Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.
Fire-fighting equipment /instructions	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire exposed containers cool.
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.	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. Wear appropriate protective equipment (see Section 8).
Methods and materials for containment and cleaning up	Small spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. Large spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Section 7 - Handling and storage

Precautions for safe handling	Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not
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expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not breathe vapor or mist. Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.

Conditions for safe storage, including any incompatibilities

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source. Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink. Protect from sunlight. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.

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	
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

Ventilation should be sufficient to prevent inhalation of any vapors.

Individual protection measures, such as personal protective equipment

Eye/face protection Safety glasses with side shields should be used if indicated. Eye wash and safety showers in the workplace are recommended.

Skin protection

Hand protection

Use solvent-resistant protective gloves for prolonged or repeated contact.

Other

If conditions risk exposure, wear suitable protective clothing.

Respiratory protection

Avoid breathing vapors. In restricted areas, use approved chemical/mechanical filters designed to remove a combination of particles and vapor. In confined areas, use an approved air line respirator or hood. A self-contained breathing apparatus is required for vapor concentrations above PEL/TLV limits.

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

10.0 ± 0.5

Melting point/freezing point

Not available.

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Initial boiling point and boiling range	Not available.
Flash point	-29°C (-20.2°F) [Pensky-Martens Closed Cup]
Evaporation rate	1.6 (butyl acetate = 1)
Flammability (solid, gas)	Flash Point below 73 °F /23 °C
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	1.9%
Explosive limit - upper (%)	19%
Vapor pressure	101.3 kPa (760 mg Hg) [at 20 °C]
Vapor density	1 [Air=1]
Relative density	6.83 lb/gal
Relative density temperature	75 °F (23.9 °C)
Solubilities (water)	N.A.
Partition Coefficient n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Kinematic(40°C (104°F)): <0.205 cm ² /s (<20.5cSt)
Viscosity Temperature	75 °F (23.9 °C)
Other Information	
VOC's	52%

Section 10 - Stability and reactivity

Reactivity	The product is stable under normal storage conditions.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	None known.
Conditions to Avoid	Keep away from heat, sparks, extreme temperature, flame, other sources of ignition and incompatible materials.
Incompatible materials	No data available.
Hazardous Decomposition Products	Hazardous decomposition products may include carbon dioxide, carbon monoxide, and other toxic fumes.

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 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
Butane (CAS 106-97-8)	Acute	Oral	LD50	Rat	500 - 5000 mg/kg
	Acute	Inhalation	LC50	Mouse	52%, 120 minutes
	Acute	Inhalation	LC50	Mouse	1237 mg/l, 120 Minutes
Ethyl Alcohol (CAS 64-17-5)	Acute	Inhalation	LC50	Rat	1355 mg/l
	Acute	Dermal	LD50	Rabbit	>2000 mg/kg
	Acute	Dermal	LD50	Rat	10470 mg/kg
Propane (CAS 74-98-6)	Acute	Inhalation	LC50	Rat	117 - 125 mg/l, 4 h
	Acute	Oral	LD50	Rat	2000 mg/kg
	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 Causes skin irritation.

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Serious eye damage/ eye irritation	Causes serious eye irritation.
Respiratory sensitization	No data available.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available.
Carcinogenicity	No data available.
Reproductive toxicity	No data available.
Specific target organ toxicity - single exposure	May cause drowsiness and dizziness. May cause respiratory irritation.
Specific target organ toxicity - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	May be fatal if swallowed and enters airways.

Section 12 - Ecological Information

Ecotoxicity	No data available.
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)	
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 data available.

Section 13 - Disposal considerations

Disposal instructions	Under RCRA, it is the responsibility of the user of the product, to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws. Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.
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.

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

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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
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

 Components

 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

 Components

 Ethyl Alcohol (CAS 64-17-5)

 Butane (CAS 106-97-8)

 Propane (CAS 74-98-6)

US.Pennsylvania RTK - Hazardous Substances

 Components

 Ethyl Alcohol (CAS 64-17-5)

 Butane (CAS 106-97-8)

 Propane (CAS 74-98-6)

US.Rhode Island RTK

 Components

 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

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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

*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 12/6/2021

Version # 01

HMIS Hazard Codes Health 3 Flammability 2 Physical Hazard 1 PPE B

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.