



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 2004-2
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	Gases Under Pressure, Compressed Gas	
	Flammable Aerosols	2
Health Hazards	Eye Irritation	2A
OSHA defined hazards	Not Classified.	

Label Elements

Hazard Symbol



Signal Word Warning
Hazard Statement Causes serious eye irritation; Flammable Aerosol; Contains gas under pressure; may explode if heated

Precautionary statement

Prevention Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves, protective clothing, eye protection and face protection.
 Keep away from heat, sparks, open flames and hot surfaces. — No smoking. Pressurized container: Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source

Response 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, regional, national and international regulations.

Hazard(s) not otherwise classified (HNOC) Toxic to aquatic life with long lasting effects

Section 3 - Composition/Information on ingredients

Mixture

Hazardous Components	Ingredient Name	CAS #	%
	Water	7732-18-5	45 - 50
	Ethyl Alcohol	64-17-5	30 - 35
	Butane	106-97-8	10 - 15
	Propane	74-98-6	1 - 5

Composition Comments The exact percentage (concentration) of composition has been withheld as a trade secret.

Section 4 - First-aid Measures

Inhalation If overcome by vapor, move person to fresh air.
Skin contact Wash skin with soap and water. Get medical attention if irritation develops or persists.
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.
Ingestion Ingestion from an aerosol product is unlikely to occur.

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Most Important symptoms or effects, acute and delayed

Acute, Deliberate inhalation of concentrated vapor or mist may cause headaches. Prolonged and repeated contact with the eyes may cause mild irritation.

Indication of immediate medical attention and special treatment needed

None needed.

Section 5 - Fire-fighting measures

Suitable extinguishing media	Dry chemical, CO2 or water spray.
Unsuitable extinguishing media	Use water spray or fog; do not use straight streams.
Specific hazards arising from the chemical	Containers are under pressure. Temperatures above 130 °F may cause cans to burst. Thermal decomposition may yield gases like carbon monoxide and carbon dioxide. Sensitivity to Mechanical Impact: Contents under pressure, keep away from heat and open flame. Sensitivity to Static Discharge: Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).
Special protective equipment and precautions for firefighters	Use personal protective equipment as required.
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.	CONTENTS UNDER PRESSURE. Do not puncture or incinerate cans. Keep out of reach of children.
Methods and materials for containment and cleaning up	Methods for Containment: Provide adequate ventilation to area being treated. Soak up spills with chemically inert, absorbent material. Methods for Cleaning Up: Clean contaminated surface thoroughly.
Environmental precautions	See Section 12 for additional Ecological Information.

Section 7 - Handling and storage

Precautions for safe handling	Avoid getting spray into eyes. Keep out of reach of children.
Conditions for safe storage, including any incompatibilities	Storage Conditions Store in a cool, dry place away from heat and open flame. Avoid storing at below-freezing temperatures. AEROSOL STORAGE LEVEL I (NFPA-30B). Incompatible Materials: Avoid heat, open flame and contact with strong oxidizers.

Section 8 - Exposure controllpersonal 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.

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Appropriate engineering controls	Ventilation should be sufficient to prevent inhalation of any vapors.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Conventional eyeglasses to guard against splashing.
Skin protection	
Hand protection	Household type gloves, if desired.
Other	None.
Respiratory protection	None required if used in a well-ventilated area.
General hygiene considerations	Normal precautions common in good housekeeping should be followed.

Section 9 - Physical and chemical properties

Appearance	Hazy, yellow liquid.
Physical state	Aerosol
Form	Aerosol. Liquefied gas.
Color	Clear, colorless
Odor	Perfumed
Odor threshold	Not available.
pH	10.5 ± 0.5
Melting point/freezing point	Not available.
Initial boiling point and boiling range	212 °F/100 °C (liquid component)
Flash point	Not available. This is an aerosol product for which Flame Projection is 6-8 inches without flashback. Cans above 120 °F may burst. product for which Flame Projection is 6-8 inches without flashback. Temperatures above 120 °F may cause cans to burst.
Evaporation rate	Faster than butyl acetate
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	No data available.
Explosive limit - upper (%)	No data available.
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	0.92 concentrate
Relative density temperature	Not available.
Solubilities (water)	Completely soluble.
Partition Coefficient n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other Information	
VOC's	51.32%

Section 10 - Stability and reactivity

Reactivity	Not applicable
Chemical stability	Stable.
Possibility of hazardous reactions	Temperatures above 130 °F may cause cans to burst with force. Hazardous polymerization does not occur.
Conditions to Avoid	Temperatures above 122 °F (50 °C).
Incompatible materials	Avoid heat, open flame and contact with strong oxidizers.
Hazardous Decomposition Products	Thermal decomposition may yield gases like carbon monoxide and carbon dioxide.

Section 11 - Toxicological information

Information on likely routes of exposure	
Ingestion	This is an aerosol product, ingestion is unlikely to occur. MAY BE HARMFUL IF SWALLOWED.
Inhalation	Prolonged inhalation of concentrated vapor or mist may cause headaches, dizziness and nausea.
Skin contact	No data available.

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Eye contact	No data available.
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
Butane (CAS 106-97-8)	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
	Acute Inhalation LC50 Mouse 1237 mg/l, 120 Minutes
Propane (CAS 74-98-6)	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.
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	No data available
Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available
Chronic effects	No known effects.

Section 12 - Ecological Information

Ecotoxicity

Component(s)

Ethyl Alcohol (CAS 64-17-5)

Aquatic

Level	Type	Code	Species	Test Results
Acute	Algae	EC50	Freshwater algae (Chlorella vulgaris)	275 mg/l, 72 h
	Crustacea	EC50	Daphnia	9268 mg/l, 48 h
	Fish	LC50	Fathead minnow (Pimephales promelas)	14200 mg/l, 96 h
Chronic	Crustacea	NOEC	Daphnia	9.6 mg/l, 9 d

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

Bioaccumulative potential

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.

Mobility in general No data available.

Other adverse effects No data available.

Section 13 - Disposal considerations

Disposal instructions Do not puncture or incinerate container. If empty: Place in trash or offer for recycling if available. If partly filled: Call your local solid waste agency for disposal instructions.

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.

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Contaminated packaging Pressurized container: Do not pierce or burn, even after use.

Section 14 - Transport information

DOT

UN number UN1950
Proper shipping name Aerosols, flammable, (each not exceeding 1 L capacity)
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

IATA

UN number UN1950
UN proper shipping name Aerosols, flammable, (each not exceeding 1 L capacity)
Transport hazard class(es) 2.1
Packing group Not Applicable.
Environmental hazards Yes
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 with restrictions.

Cargo aircraft only Allowed with restrictions.

Packaging Exceptions LTD QTY

IMDG

UN number UN1950
UN proper shipping name AEROSOLS
Transport hazard class(es) 2.1
Packing group Not Applicable.
Environmental hazards No
Marine pollutant
Labels required 2.1
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.

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)

Components	% by Weight	Comment
Ethyl Alcohol (CAS 64-17-5)	30 - 35	
Butane (CAS 106-97-8)	10 - 15	
Propane (CAS 74-98-6)	1 - 5	

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

Component	Result	Comment
Ethyl Alcohol (CAS 64-17-5)		
Propane (CAS 74-98-6)		

CERCLA Hazardous Substance List (40 CFR 302.4)

Components	Not listed.
Ethyl Alcohol (CAS 64-17-5)	Result LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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Hazard Categories	Immediate Hazard	Yes
	Delayed Hazard	No
	Fire Hazard	Yes
	Pressure Hazard	No
	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 (HAPs) 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 Water (CAS 7732-18-5) 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 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 2/8/2024
Version # 03

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