SAFETY DATA SHEET

1. Product and Company Identification

PRODUCT NUMBER: 4955

PRODUCT NAME: GERM ENFORCER

PRODUCT DESCRIPTION: Aerosol Disinfectant Spray and Deodorant

COMPANY INFORMATION: **PRO CHEM, INC.**
1475 Bluegrass Lakes Parkway
Alpharetta, GA 30004

COMPANY PHONE: 1-800-241-8180

EMERGENCY TELEPHONE: 1-800-535-5053

INFOTRAC: 1-800-535-5053

2. Hazards Identification

GHS CLASSIFICATION:
Aerosols - Category 1
Gases Under Pressure - Compressed Gas
Skin Irritation - Category 2
Eye Irritation - Category 2A

SIGNAL WORD: **DANGER**

SYMBOL:

Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) - Category 3
Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) - Category 3
Specific Target Organ Toxicity - Repeated Exposure - Category 2
Aspiration Hazard - Category 1
Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 4.7%
Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 41.7%
Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 4.7%

HAZARD STATEMENTS:

Physical: H222 - Extremely flammable aerosol.
H280 - Contains gas under pressure; may explode if heated.
Health: H304 - May be fatal if swallowed and enters airways.
H319 - Causes serious eye irritation.
H315 - Causes skin irritation.
H335 - May cause respiratory irritation.
H336 - May cause drowsiness or dizziness.
H373 - May cause damage to organs through prolonged or repeated exposure.

PRECAUTIONARY STATEMENTS:

General: P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P103 - Read label before use.
Prevention: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 - Do not spray on an open flame or other ignition source.
P251 - Do not pierce or burn, even after use.
P280 - Wear protective gloves, eye protection and face protection.
P264 - Wash hands thoroughly after handling.
P260 - Do not breathe mist, vapors, or spray.
P271 - Use only outdoors or in a well-ventilated area.
Response: P314 - Get medical attention if you feel unwell.
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P331 - Do NOT induce vomiting.
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 - Call a POISON CENTER or doctor if you feel unwell.
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
P362 + P364 - Take off contaminated clothing and wash it before reuse.
P332 + P313 - If skin irritation occurs: Get medical attention.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 - If eye irritation persists: Get medical attention.
Storage: P405 - Store locked up.
P410 - Protect from sunlight.
P412 - Do not expose to temperatures exceeding 50°C / 122°F.
P403 - Store in a well-ventilated place.
Disposal: P501 - Dispose of contents and container in accordance with local, regional, national and international regulations.

SUPPLEMENTARY 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.
WARNING: This product contains a chemical known to the State of California to cause cancer.

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.

3. Composition / Information on Ingredients

Chemical Name	CAS	Concentration % by Weight
Ethyl Alcohol	64-17-5	25%-50%
Butane	106-97-8	10%-25%
Propane	74-98-6	1%-5%

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality.

4. First Aid Measures

EMERGENCY OVERVIEW:

EYES: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

SKIN: 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.

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.

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.

5. Fire-Fighting Measures

SUITABLE FIRE EXTINGUISHING MEDIA:

Use extinguishing media suitable for surrounding fire.

UNSUITABLE FIRE EXTINGUISHING MEDIA:

None known.

SPECIFIC HAZARDS IN CASE OF FIRE:

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.

SPECIFIC FIRE-FIGHTING METHODS:

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.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

6. Accidental Release Measures

EMERGENCY PROCEDURE:

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.

PERSONAL PRECAUTIONS:

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.

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).

RECOMMENDED EQUIPMENT:

Wear appropriate protective equipment (see Section 8).

7. Handling and Storage

SAFE HANDLING:

Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Avoid contact with eyes, skin and clothing. Do not breathe vapor or mist. Do not ingest. 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.

SAFE STORAGE & INCOMPATIBILITIES:

Ventilation Requirements: 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.

Storage Room Requirements: 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.

8. Exposure Controls / Personal Protection

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m^3)	OSHA STEL (ppm)	OSHA STEL (mg/m^3)	OSHA-Tables-Z1,2,3	OSHA Carcinogen	OSHA Skin designation	NIOSH TWA (ppm)
Butane								800
Ethyl Alcohol	1000	1900			1			1000
Propane	1000	1800			1			1000

Chemical Name	NIOSH TWA (mg/m^3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m^3)	NIOSH Carcinogen	ACGIH TWA (ppm)	ACGIH TWA (mg/m^3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m^3)
Butane	1900						1000 (EX)	
Ethyl Alcohol	1900						1000	
Propane	1800						Simple asphyxiant (D), explosion hazard (EX)	

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

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.

APPROPRIATE ENGINEERING CONTROLS:

Ventilation should be sufficient to prevent inhalation of any vapors.

9. Physical & Chemical Properties

Appearance:	Liquid.	**Flammability(solid/gas):**	Flash point below 73°F/23°C
Odor Description:	N.A.	**Explosive Limit-Lower (%):**	1.9%
Odor Threshold:	N.A.	**Explosive Limit-Upper (%):**	19%
pH:	10	**Vapor Density:**	1 (air = 1)
Melting/Freezing Point:	N.A.	**Vapor Pressure:**	101.3 kPa (20°C)
Boiling Point/Range:	N.A. Low/High.	**Solubility (water):**	N.A.
Viscosity, Kinematic:	<0.205 cm^2/s (40°C)	**Auto-Ignition Temp:**	N.A.
Flash Point:	-29°C (-20.2°F) [Pensky-Martens Closed Cup]	**Decomposition Temp:**	N.A.
Density:	6.90 lb/gal	**Evaporation Rate:**	1.6 (butyl acetate = 1)
Density VOC:	2.50 lb/gal	**% VOC:**	36.20%

10. Stability & Reactivity Information

CHEMICAL STABILITY:

Stable.

CONDITIONS TO AVOID:

Keep away from heat, sparks, extreme temperatures, flame, other sources of ignition and incompatible materials.

INCOMPATIBLE MATERIALS:

None known.

HAZARDOUS REACTIONS/POLYMERIZATION:

Under normal conditions of storage and use, hazardous reactions will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological Information

Components	Species	Test Results
Ethyl Alcohol (64-17-5)		
Acute		
Inhalation		
LC50	Mouse	Approximately 21,000 ppm (4-hour exposure); cited as 39 g/m3 (4-hour exposure) (1, unconfirmed)
Oral		
LD50	Rat	LD50 (oral, rat): 7,060 mg/kg (41); 10,600 mg/kg (41); 13,660 mg/kg (37)
	Mouse	LD50 (oral, mouse): 3,450 mg/kg (1, unconfirmed)
	Guinea Pig	LD50 (oral, guinea pig): 5,560 mg/kg (37)
Butane (106-97-8)		
Acute		
Inhalation		
LC50	Mouse	C50 (mouse): 202,000 ppm (481,000 mg/m3) (4-hour exposure); cited as 680 mg/L (2-hour exposure) (9)
	Rat	LC50 (rat): 276,000 ppm (658,000 mg/m3) (4-hour exposure); cited as 658 mg/L (4- hour exposure) (9)

ACUTE TOXICITY:
Inhalation: effects of overexposure include irritation of the respiratory tract, headache, dizziness, nausea, and loss of coordination.
SKIN CORROSION/IRRITATION:
Causes skin irritation.
SERIOUS EYE DAMAGE/EYE IRRITATION:
Causes serious eye irritation.
RESPIRATORY SENSITIZATION:
No data available.
SKIN SENSITIZATION:
No data available.
GERM CELL MUTAGENICITY:
No data available.
CARCINOGENICITY:
No data available.
REPRODUCTIVE TOXICITY:
No data available.
SPECIFIC TARGET ORGAN TOXICITY -single exposure:
May cause drowsiness or 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.

12. Ecological Information

TOXICITY:
No data available.
PERSISTENCE AND DEGRADABILITY:
No data available.
BIOACCUMULATIVE POTENTIAL:
No data available.
MOBILITY IN SOIL:
No data available.
OTHER ADVERSE EFFECTS:
No data available.

13. Disposal Consideration

WASTE DISPOSAL:
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.

14. Transportation Information

DOT: **UN Number:** UN1950
UN Proper Shipping Name: Aerosols.
Class: 2.1 (LTD QTY)
Packaging Group: N.A.
Marine Pollutant: No data available.
Toxic-Inhalation Hazard: N.A.

IATA: **UN Number:** UN1950
UN Proper Shipping Name: Aerosols, flammable.
Transport Hazard Class(es):
Class: 2.1 (LTD QTY)
Packaging Group: N.A.
IMDG: **UN Number:** UN1950
UN Proper Shipping Name: Aerosols, flammable, (each not exceeding 1 L capacity)
Class: 2.1 (LTD QTY)
Marine Pollutant: N.A.

15. Regulatory Information

CAS	Chemical Name	% By Weight	Regulation List
64-17-5	Ethyl Alcohol	25%-50%	SARA312, VOC, TSCA, ACGIH, OSHA
74-98-6	Propane	1%-5%	SARA312, VOC, TSCA, ACGIH, OSHA
106-97-8	Butane	10%-25%	SARA312, VOC, TSCA, ACGIH

16. Other Information

*There are points of differences between OSHA GHS and UN GHS. In 90% of the categories, they can be used interchangeably, but for the Skin Corrosion/Irritant Category and the Specific Target Organ Toxicity (Single and Repeated Exposure) Categories. In these cases, our system will say UN GHS. ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDGCanadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center (US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)-HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self-Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ- Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94- 469; TWA- Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.-Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

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