

# Material Safety Data Sheet

May be used to comply with  
OSHA's Hazard Communication Standard  
29 CFR 1910.1200. Standard must be  
consulted for specific requirements

# U.S. Department of Labor

Occupation Safety and Health Administration  
(Non-Mandatory Form)  
Form Approved  
OMB No. 1218-0072

## IDENTITY

**BIO-KLEEN ALL PURPOSE CLEANER (120375)**

*Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.*

## Section I

Manufactured For: <b>Beaver Research Company</b>	Emergency Telephone Number <b>1-800-255-3924 (Chem-Tel)</b>
Address (Number, Street, City, State, and ZIP Code) <b>3700 E. Kilgore Road, Portage, MI 49002</b>	Telephone Number For Information <b>269-382-0133</b>
PRODUCT HAZARD RATINGS: 4=Extreme 1=Slight 3=Serious 0=Minimal 2=Moderate	Health: 1 Fire: 2 Reactivity: 0 Protective Equipment: *B (HMIG)
	Date Prepared <b>04/22/99</b>
	Signature of Preparer (optional)

## Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	CAS No.	OSHA PEL	ACGIH TLV/TWA	Exposure Limits (LD50-Oral Rat)	% (optional)
Citrus Terpenes	5989-27-5 99-85-4 586-62-9	NA	NA	4400mg/kg	1-5
Liquefied petroleum Gas	68476-85-7	1000ppm	1000ppm	NA	10.0

Unidentified ingredients are not considered hazardous under the Federal Hazard Communication Standard.

**Components Listed As A Suspected Carcinogen: None**

## Section III - Physical/Chemical Characteristics

Boiling Point	NA	Specific Gravity (H <sub>2</sub> O = 1)	<1
Vapor Pressure (psig)	117@130°F	Melting Point	NA
Vapor Density (AIR = 1)	>1	Evaporation Rate (Butyl Acetate = 1)	<1
Solubility in Water Appreciable	pH NA	Total VOC: 7.75%	
Appearance and Odor	Clear water, white liquid; citrus aroma.		

## Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits Non-flammable	LEL 1.8	UEL 9.2
Extinguishing Media	Carbon dioxide, foam and/or dry chemical may be used.		
Special Fire Fighting Procedures	Containers should be cooled with water to prevent vapor pressure build up. Use equipment or shielding, as required, to protect personnel from bursting, rupturing or venting containers.		
Unusual Fire and Explosion Hazards	At elevated temperatures (over 54°C-130°F) containers exposed to direct flame or heat contact should be cooled with water to prevent weakening of container structure.		

## Section V - Reactivity Data

Stability	Unstable	Conditions to Avoid	NA
	Stable	X	
Incompatibility (Materials to Avoid)	Strong oxidizing agents.		
Hazardous Decomposition or Byproducts	NA		
Hazardous Polymerization	May Occur	Conditions to Avoid	Do not store above 54C-130F. Keep away from heat, direct sunlight, open flames or sparks. Dropping of containers may cause bursting.
	Will Not Occur	X	

**Section VI - Health Hazard Data**

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	Yes	Yes	Yes

Health Hazards (Acute and Chronic)

NA

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
	No	No	No

Signs and Symptoms of Exposure

Inhalation may cause dizziness, drowsiness and throat irritation. Eye contact may be irritating. Skin contact may cause slight redness.

Medical Conditions Generally Aggravated by Exposure

Preexisting skin or eye disorders and upper respiratory inflammation may be aggravated by exposure to this product.

Emergency and First Aid Procedure

**Eye Contact:** Flush eyes with plenty of water for 15 minutes while holding eyelids open. Get medical attention if irritation persists. **Skin Contact:** Remove contaminated clothing. Flush skin with water, follow by washing with soap and water. If irritation occurs, get medical attention. Do not reuse clothing until cleaned. **Inhalation:** Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention. **Ingestion:** Get medical attention.

**Section VII - Precautions for Safe Handling and Use**

Steps to be Taken in Case Material is Released or Spilled

Remove all sources of ignition and ventilate area. Soak up spill with an inert absorbent and place into a designated disposal container. Consult local regulatory agency for proper disposition of material.

Waste Disposal Method

Do not puncture or incinerate containers. When contents are depleted continue to depress button until all gas is expelled. Dispose of container in accordance with local, state, and federal regulations.

Precautions to be Taken in Handling and Storage

Avoid breathing vapor. Keep away from heat and flame. Use with adequate ventilation. Do not puncture or incinerate containers. Do not expose to direct sunlight or store at temperatures above 130°F (54°C). Store as Level 1 Aerosol (NFPA 30B).

Other Precautions

Please read and follow the directions on the product label; they are your best guide to using this product in the most effective way, and give the necessary safety precautions to protect your health using this product in the most effective way, and give the necessary safety precautions to protect your health.

**Section VIII - Control Measures**

Respiratory Protection (Specify Type)

None required if good ventilation is maintained. If exposure exceeds occupational exposure limits (Sec.II), use NIOSH approved respirator to prevent overexposure.

Ventilation	Local Exhaust	adequate	Special	NA
	Mechanical(General)	optional	Other	NA

Protective Gloves

Chemical resistant gloves\*.

Eye Protection

Chemical safety glasses are recommended\*.

Other Protective Clothing or Equipment

Wear impervious clothing to prevent skin contact.

Work/Hygienic Practices

Ensure strict sanitary conditions are conformed to when working around chemicals. Protective clothing and equipment should be in accordance with 29 CFR 1910.132 and CFR 1910.133.

NG-Negligible NA-Not Applicable NE-Not Established UN-Unavailable ND-Not Determined

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