

# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Product number** 0239  
**Material name** **Rock Doctor Granite Cleaner**  
**Company information** APEX PRODUCTS LLC  
8333 MELROSE DR.  
LENEXA, KS 66214  
**Company phone** General Assistance 1-800-543-8371  
**Emergency telephone US** 1-866-836-8855  
**Version #** 01

## 2. Hazards Identification

**Emergency overview** CONTENTS UNDER PRESSURE.  
Aerosol. Pressurized container may explode when exposed to heat or flame. Will be easily ignited by heat, spark or flames. Very toxic.

### Potential health effects

**Routes of exposure**

Inhalation. Ingestion. Skin contact. Eye contact.

**Eyes**

Contact with eyes may cause irritation.

**Skin**

May be harmful if absorbed through skin. May cause skin irritation.

**Inhalation**

Intentional misuse by concentrating and inhaling the product can be harmful or fatal. May cause irritation of respiratory tract. Prolonged inhalation may be harmful.

**Ingestion**

Exposure by ingestion of an aerosol is unlikely. Components of the product may be absorbed into the body by ingestion. Irritating. May cause nausea, stomach pain and vomiting.

### Target organs

Blood. Central nervous system. Kidneys. Liver. Respiratory system.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged and may cause blood damage. These effects have not been observed in humans.

### Chronic effects

May be harmful if absorbed through skin. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

### Signs and symptoms

Symptoms are prostration, gasping, pallor, and uncoordinated movements. Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

**Potential environmental effects** May cause long-term adverse effects in the environment.

## 3. Composition / Information on Ingredients

Components	CAS #	Percent
Butane	106-97-8	1 - 5
Ethylene Glycol Monobutyl Ether	111-76-2	1 - 5
Propane	74-98-6	1 - 5
Other components below reportable levels		60 - 100

## 4. First Aid Measures

### First aid procedures

**Eye contact**

Immediately flush eyes with plenty of water for at least 15 minutes. If a contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Continue rinsing. Call a physician or poison control center immediately.

**Skin contact**

Remove and isolate contaminated clothing and shoes. Immediately flush skin with plenty of water. Call a physician or poison control center immediately. For minor skin contact, avoid spreading material on unaffected skin. Wash clothing separately before reuse.

<b>Inhalation</b>	Move to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician or poison control center immediately.
<b>Ingestion</b>	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth thoroughly. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
<b>Notes to physician</b>	Symptoms may be delayed.
<b>General advice</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

## 5. Fire Fighting Measures

<b>Flammable properties</b>	Flammable by WHMIS criteria. Heat may cause the containers to explode. Ruptured cylinders may rocket.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Water.
<b>Unsuitable extinguishing media</b>	Do not use a solid water stream as it may scatter and spread fire.
<b>Protection of firefighters</b>	
<b>Specific hazards arising from the chemical</b>	Contents under pressure. Pressurized container may explode when exposed to heat or flame. Fire may produce irritating, corrosive and/or toxic gases.
<b>Protective equipment for firefighters</b>	Firefighters should wear full protective clothing including self contained breathing apparatus. Structural firefighters protective clothing will only provide limited protection. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Do not direct water at source of leak or safety devices as icing may occur. Use water spray to cool unopened containers. 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. Some of these materials, if spilled, may evaporate leaving a flammable residue.
<b>Specific methods</b>	Cool containers exposed to flames with water until well after the fire is out.
<b>Explosion data</b>	
<b>Sensitivity to static discharge</b>	Not available.
<b>Sensitivity to mechanical impact</b>	Not available.

## 6. Accidental Release Measures

<b>Personal precautions</b>	Consider initial downwind evacuation for at least 500 meters (1/3 mile). Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. For personal protection, see section 8 of the MSDS.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Do not contaminate water.
<b>Methods for containment</b>	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. If possible, turn leaking containers so that gas escapes rather than liquid. Move the cylinder to a safe and open area if the leak is irreparable. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Keep out of low areas. Prevent entry into waterways, sewer, basements or confined areas.
<b>Methods for cleaning up</b>	Ventilate the area. Should not be released into the environment. Stop the flow of material, if this is without risk. Isolate area until gas has dispersed. Following product recovery, flush area with water. Clean up in accordance with all applicable regulations. For waste disposal, see section 13 of the MSDS.
<b>Other information</b>	Clean up in accordance with all applicable regulations.

## 7. Handling and Storage

### Handling

Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Do not breathe mist or vapor. Do not get this material in contact with eyes. Do not get this material in contact with skin. Avoid prolonged exposure. Do not get this material on clothing. Do not use in areas without adequate ventilation. Wash thoroughly after handling.

### Storage

Keep locked up. Contents under pressure. The pressure in sealed containers can increase under the influence of heat. Do not expose to heat or store at temperatures above 120°F/49°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. This material can accumulate static charge which may cause spark and become an ignition source. Store in a well-ventilated place. Keep away from food, drink and animal feedingstuffs. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the MSDS). Level 1 Aerosol (NFPA 30B)

## 8. Exposure Controls / Personal Protection

### Occupational exposure limits

#### ACGIH Biological Exposure Indices Components

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	BEI	200 mg/g

#### US. ACGIH Threshold Limit Values Components

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	TWA	20 ppm

#### Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
n-Butane (CAS 106-97-8)	TWA	1000 ppm
2-Butoxyethanol (CAS 111-76-2)	TWA	97 mg/m3
		20 ppm
Propane (CAS 74-98-6)	TWA	1000 ppm

#### Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
n-Butane (CAS 106-97-8)	STEL	750 ppm
	TWA	600 ppm
2-Butoxyethanol (CAS 111-76-2)	TWA	20 ppm

#### Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
n-Butane (CAS 106-97-8)	TWA	800 ppm
2-Butoxyethanol (CAS 111-76-2)	TWA	20 ppm

#### Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value
n-Butane (CAS 106-97-8)	TWA	1900 mg/m3
		800 ppm
2-Butoxyethanol (CAS 111-76-2)	TWA	97 mg/m3
		20 ppm
Propane (CAS 74-98-6)	TWA	1800 mg/m3
		1000 ppm

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	PEL	240 mg/m3
Propane (CAS 74-98-6)	PEL	50 ppm 1800 mg/m3 1000 ppm

<b>Engineering controls</b>	Ensure adequate ventilation, especially in confined areas.
<b>Personal protective equipment</b>	
<b>Eye / face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin protection</b>	Wear chemical protective equipment that is specifically recommended by the manufacturer.
<b>Respiratory protection</b>	If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

**9. Physical & Chemical Properties**

<b>Appearance</b>	Not available.
<b>Boiling point</b>	198.61 °F (92.56 °C) estimated
<b>Color</b>	Not available.
<b>Flash point</b>	-156.00 °F (-104.44 °C) Propellant estimated
<b>Form</b>	Aerosol.
<b>Melting point/Freezing point</b>	Not available.
<b>Odor</b>	Not available.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Physical state</b>	Gas.
<b>Vapor pressure</b>	46.02 psig @70F estimated
<b>Solubility (water)</b>	Not available.
<b>Specific gravity</b>	0.964 estimated
<b>Flammability limits in air, upper, % by volume</b>	9.5 % estimated
<b>Flammability limits in air, lower, % by volume</b>	1.8 % estimated
<b>Other data</b>	
<b>Heat of combustion</b>	2.26 kJ/g estimated

**10. Chemical Stability & Reactivity Information**

<b>Chemical stability</b>	Risk of ignition.
<b>Conditions to avoid</b>	Aerosol containers are unstable at temperatures above 49°C. Avoid temperatures exceeding the flash point.
<b>Hazardous decomposition products</b>	Not available.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.

**11. Toxicological Information**

Toxicological data		Test Results
Product	Species	
Rock Doctor Granite Cleaner (CAS Mixture)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	14035.0879 mg/kg, estimated

Product	Species	Test Results	
<i>Inhalation</i> LC50	Cat	1047.0176 mg/l, If <1L: Consumer Commodity Hours, estimated	
	Mouse	24561.4043 mg/l, 7 Hours, estimated	
		9971.9297 mg/l, 10 Minutes, estimated	
	Rabbit	4715.7896 mg/l, If <1L: Consumer Commodity Hours, estimated	
		4645.6143 mg/l, 2 Hours, estimated	
	Rat	9894.7373 mg/l, If <1L: Consumer Commodity Hours, estimated	
		70382.7813 mg/l, 15 Minutes, estimated	
	LCL0	Cat	10666.667 mg/l, 2 Hours, estimated
			7157.8945 mg/l, If <1L: Consumer Commodity Hours, estimated
		Rabbit	2445.1689 mg/l, 4 Hours, estimated
			1482.6064 mg/l/4h, estimated
		Rat	6877.1934 mg/l, If <1L: Consumer Commodity Hours, estimated
6877.1934 mg/l, If <1L: Consumer Commodity Hours, estimated			
<i>Oral</i> LD50	Guinea pig	1964.9122 mg/l, If <1L: Consumer Commodity Hours, estimated	
	Mouse	42.1053 g/kg, estimated	
	Rabbit	42.1053 g/kg, estimated	
	Rat	11.2281 g/kg, estimated	
<i>Other</i> LD50	13281.3984 mg/kg, estimated		
	Mouse	24685.5586 mg/kg, estimated	
	Rabbit	9824.5615 mg/kg, estimated	
	Rat	8819.6738 mg/kg, estimated	

Components	Species	Test Results
Butane (CAS 106-97-8)		
<b>Acute</b>		
<i>Inhalation</i>		
LC50	Mouse	680 mg/l, 2 Hours
	Rat	658 mg/l, 4 Hours
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	400 mg/kg
<i>Inhalation</i>		
LC50	Mouse	700 mg/l, 7 Hours
	Rat	450 mg/l, 4 Hours
<i>Oral</i>		
LD50	Guinea pig	1.2 g/kg
	Mouse	1.2 g/kg
	Rabbit	0.32 g/kg

Components	Species	Test Results
	Rat	560 mg/kg
<i>Other</i>		
LD50	Mouse	1130 mg/kg
	Rabbit	280 mg/kg
	Rat	340 mg/kg
Propane (CAS 74-98-6)		
<b>Acute</b>		
<i>Inhalation</i>		
LC50	Rat	> 1442.847 mg/l, 15 Minutes 658 mg/l/4h

\* Estimates for product may be based on additional component data not shown.

#### Chronic effects

Prolonged inhalation may be harmful. May be harmful if absorbed through skin.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.

#### Carcinogenicity

##### ACGIH Carcinogens

Ethylene Glycol Monobutyl Ether (CAS 111-76-2)

A3 Confirmed animal carcinogen with unknown relevance to humans.

##### IARC Monographs. Overall Evaluation of Carcinogenicity

Ethylene Glycol Monobutyl Ether (CAS 111-76-2)

3 Not classifiable as to carcinogenicity to humans.

## 12. Ecological Information

#### Ecotoxicological data

Product	Species	Test Results
Rock Doctor Granite Cleaner (CAS Mixture)		
Algae	IC50	Algae 1137.979 mg/L, 72 Hours, estimated
Crustacea	EC50	Daphnia 18806.959 mg/L, 48 Hours, estimated
Fish	LC50	Fish 296.9035 mg/L, 96 Hours, estimated

Components	Species	Test Results
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)		
<b>Aquatic</b>		
Fish	LC50	Inland silverside (Menidia beryllina) 1250 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

#### Ecotoxicity

Contains a substance which causes risk of hazardous effects to the environment.

#### Environmental effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

#### Persistence and degradability

Not available.

#### Partition coefficient

Butane	2.89
Ethylene Glycol Monobutyl Ether	0.83
Propane	2.36

## 13. Disposal Considerations

#### Disposal instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.

#### 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 (see: Disposal instructions).

**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.

**14. Transport Information****TDG**

UN number UN1950  
 UN proper shipping name Aerosols, flammable  
 Hazard class 2.1  
 Special provisions N82  
 Labels required 2.1  
 Packaging exceptions If <1L: Limited Quantity  
 Packaging non bulk None  
 Packaging bulk None

**IATA**

UN number UN1950  
 UN proper shipping name Aerosols, flammable  
 Transport hazard class(es) 2.1  
 Labels required 2.1  
 Special precautions for user Read safety instructions, MSDS and emergency procedures before handling.  
 Packaging Exceptions LTD QTY

**IMDG**

UN number UN1950  
 UN proper shipping name AEROSOLS  
 Transport hazard class(es) 2.1  
 Labels required None  
 Special precautions for user Read safety instructions, MSDS and emergency procedures before handling.  
 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.  
 Packaging Exceptions LTD QTY

**IATA; IMDG; TDG****15. Regulatory Information****Canadian regulations**

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**WHMIS status**

Controlled

**WHMIS classification**

A - Compressed Gas  
 B1 - Flammable Gases  
 D1A - Immediate/Serious-VERY TOXIC  
 D2B - Other Toxic Effects-TOXIC

**WHMIS labeling****Inventory status**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes

Country(s) or region	Inventory name	On inventory (yes/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 (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*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).

## 16. Other Information

### Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.