

Material Safety Data Sheet

GM7313A

MSDS

Revision Date: 6-29-06

Section I – Product and Company Identification

Trade Name: Mountain Grout
Product Name: P.L.U.G.S./ P.L.U.G.S. – Quick Draw (Cartridge System)
Distributed by: 24 Hr. Emergency
Telephone Number: Chemtrec: 800-424-9300
Green Mountain International, Inc.
235 Pigeon Street
Waynesville, NC 28786
800-942-5151 US/Canada
828-456-9970 International

Section II – Composition/Information on Ingredients

Ingredient Name	CAS#	Percent
_ Isocyanic acid, polymethylenepolyphenylene ester	9016-87-9	45 – 55 %
_ Methylenebisphenylene diisocyanate (MDI)	101-68-8	35 – 45 %
_ Diphenylmethane diisocyanate	26447-40-5	1 – 5 %

Section III – Hazards Identification

Emergency Overview

Liquid, brown color.

Warning! May cause irritation to the eyes, skin, and respiratory system.

Repeated exposure may lead to respiratory sensitization. May cause irritation or corrosion when ingested.

Health Effects: Eyes: This product may cause irritation to the eyes.

Health Effects: Skin: This product may cause irritation to the skin. Prolonged or repeated skin contact may result in redness, burning sensation or dermatitis. May cause sensitization by skin contact.

Health Effects: Inhalation: Vapors or mist at high concentrations may irritate the mucous membrane in the respiratory tract (nose, throat, lungs) causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function. Repeated exposure may lead to respiratory sensitization reactions, producing an asthma-like condition. Prolonged or repeated overexposure to isocyanates has been reported to cause lung damage, which may be permanent.

Health Effects: Ingestion: Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, and diarrhea. This product may produce corrosive damage to the gastrointestinal tract if it is swallowed.

Section IV – First Aid Measures

Eyes: Immediately flush eyes with water for at least 15 minutes while holding

eyelids open. If irritation persists, get medical attention.

Skin: Immediately take off all contaminated clothing. For skin contact, flush with large amounts of water. If irritation persists, get medical attention. Wash contaminated clothing before reuse.

Inhalation: If symptoms are experienced, remove source of contamination or move victim to fresh air. If symptoms persist, get medical attention. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Seek medical attention.

Ingestion: If the material is swallowed, get immediate medical attention or advice. **Do Not** induce vomiting.

Section V – Fire Fighting Measures

Flash Point: >390 °F, >198.9 °C (PMCC)

Extinguishing Media: Dry chemical, foam, carbon dioxide, water fog.

Fire Fighting Equipment/Instructions: Firefighters should wear full fire-fighting turn-out gear (full Bunker gear) including NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

Hazardous Combustion Products: Irritating and toxic gases or fumes may be released during a fire.

Section VI– Accidental Release Measures

Spill and Leak Procedures

Emergency Action: Isolate spill or leak area immediately. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering.

Do not touch or walk through spilled material. Wear appropriate personal protective equipment during cleanup.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to container for later disposal. Collect material in a suitable and properly labeled OPEN container. Do not place in sealed container.

Large Spills: Dike ahead of liquid spill for later disposal. Prevent entry into waterways, sewers, basements or confined areas.

Surfaces may become slippery after spillage.

Section VII – Handling and Storage

Handling Procedures: Avoid contact with skin and eyes. Avoid breathing vapors or mists of this product. Wash thoroughly after handling. As with all chemicals good industrial hygiene practices should be followed when handling this material.

Storage Procedures: Store in a dry, well-ventilated area. Room temperature – normal conditions.

Section VIII – Exposure Controls/Personal Protection

Engineering Controls: Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

Personal Protective Equipment: Eyes/Face: Wear chemical goggles; face shield (if splashing is possible).

Personal Protective Equipment: Skin: Wear clothing sufficient to prevent all skin contact should be worn, such as coveralls and long sleeves. Use impervious gloves.

Personal Protective Equipment: Respiratory: If vapors are present or irritation is experienced, NIOSH approved respiratory protection for organic vapors should be worn.

Personal Protective Equipment: General: Eye wash fountain and emergency showers are recommended.

_Methylenebisphenylene Diisocyanate (MDI)	101-68-8	
ACGIH – Occupational Exposure Limits – TWAs		0.005 ppm TWA
Mexico – Occupational Exposure Limits – TWAs	0.02 ppm TWA; 0.2 mg/m ³ TWA	0.005 ppm TWA (listed as Methylene bisphenyl isocyanate); 0.051 mg/m ³ TWA (listed as Methylene bisphenyl isocyanate)
NIOSH – Health Standards – Exposure Limits	5 ppb TWA; 50 ug/m ³ TWA	C (10 min) 20 ppb; C (10 min) 200 ug/m ³ (Listed under 'Diisocyanates')
NIOSH – Health Standards – Health Effects and Precautions		Respiratory effects and sensitization, pulmonary irritation (Listed under 'Diisocyanates')
NIOSH – Pocket Guide – Ceiling Limits	0.020 ppm Ceiling (10 minute); 0.2 mg/m ³ Ceiling (10 minute)	
NIOSH – Pocket Guide – IDLHs (Immediately Dangerous to Life or Health)		75 mg/m ³ IDLH
NIOSH – Pocket Guide – Target Organ/eyes, respiratory system		
NIOSH – Pocket Guide – TWAs	0.005 ppm TWA; 0.05 mg/m ³ TWA	
OSHA – Final PELs – Ceiling Limits	0.02 ppm Ceiling; 0.2 mg/m ³ Ceiling	

Section IX – Physical & Chemical Properties

Flash Point:	>390 °F, 198.9 °C PMCC	Boiling Point:	406 °F, 207.8 °C
Specific Gravity:	1.24 g/ml (10.317 lb/gal) @25 °C	Melting Point:	<32 °F, 0 °C
Percent Volatile:	NIL	Vapor Pressure:	<10-5 mm Hg @ 25 °C
Vapor Density:	8.5 (Air =1)	Viscosity:	200 cps @ 25 °C
Evaporation Rate:	Estimated slower than ethyl ether	Solubility in Water:	Not soluble
Bulk Density:	10.3 lbs/gal	Freezing Point:	<32 °F, 0 °C
Appearance:	Liquid	Color:	Brown

Section X – Stability and Reactivity

Chemical Stability: Stable under normal conditions.

Incompatibility: This product is incompatible with water, alcohol, amines, alkalis, and metal compounds (catalysts).

Hazardous Decomposition: Carbon monoxide, oxides of nitrogen, traces of HCN, MDI vapors or aerosols.

Hazardous Polymerization: Contact with moisture, other materials which react with isocyanates, or temperatures over 320 °F (160 °C) may cause polymerization.

Section XI – Toxicological Information

Carcinogenicity: Not listed as carcinogenic according to IARC, NTP or OSHA.

Other Toxicological Information

_Methylenebisphenylene Diisocyanate (MDI) (101-68-8):

NIOSH – Selected LD50s and LC50s: Oral LD50 (rat): 9200 mg/kg
Oral LD50 (mouse): 2200 mg/kg

_Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9):

NIOSH – Selected LD50s and LC50s: Inhalation LC50 (rat): 490 mg/m³/4H
Oral LD50 (rat): 49 g/kg
Dermal LD50 (rabbit): >9400 mg/kg

Section XII – Ecological Information

Ecotoxicity: Aquatic LC50= >100 – 1000 mg/L

Section XIII – Disposal Consideratons

Disposal Instructions: Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial and Local regulations. Regulations may vary in different locations. Characterization and compliance with applicable laws are the responsibility solely of the generator.

Section XIV – Transport Information

DOT Proper Shipping Name: Refer to bill of lading or container label for DOT or other transportation hazard classification, if any.

Section XV – Regulatory Information

U.S. Federal Regulations

_Methylenebisphenylene diisocyanates (MDI) 101-68-8:

CAA (Clean Air Act) – 1990 Hazardous Air Pollutants	Present
CERCLA/SARA – Section 313 – Emission Reporting	1.0% de minimus concentration (Listed under ‘Diisocyanates’)
TSCA (Toxic Substances Control Act) – Section 8(a) – PAIR – Reporting List	Effective 10/29/90; Reporting 12/27/90

Section XV – Regulatory Information (continued)

_Methylenebisphenylene diisocyanates (MDI) 101-68-8:

TSCA (Toxic Substances Control Act) – Section 8(d)	Effective Date: 6/1/87; Sunset Date: 6/1/97
716.120(a) – Health and Safety	
TSCA (Toxic Substances Control Act) – Section 8(d)	Only those chemical substances specifically listed within this category are subject to all provisions of part 716 for the time period from the effective date of the rule until the sunset date. Those chemicals are designated in the

data field as
belonging to this
category.

_Diphenylmethane diisocyanate 26447-40-5

- CERCLA/SARA – Section 313 – Emission Reporting 1.0 percent de minimis concentration (Chemical Category N120)
- TSCA (Toxic Substances Control Act) – Section 8(a) Effective 10/29/90; Reporting 12/27/90
- PAIR – Reporting List
- TSCA (Toxic Substances Control Act) – Section 8(d) Effective 10/29/90; Reporting 12/27/90
- 716.120(a) – Health and Safety

_Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9

- CERCLA/SARA – Section 313 – Emission Reporting 1.0% de minimis concentration (Listed under 'Diisocyanates')
- TSCA (Toxic Substances Control Act) – Section 8(d)- Effective Date: 6/1/87; Sunset Date
- 716.120(a) – Health and Safety 12/19/95

Inventories: All components of this product are listed on the following inventories: U.S.A (TSCA), Canada (DSL), Japan (ENCS), Australia (AICS), Korea (ECL), China (EICS), Philippines (PICCS)

Reportable Quantity (RQ) of this product is 12,500 pounds based upon _Methylenebisphenylene diisocyanates (MDI) (101-68-8) which yielded the lowest resultant RQ according to the following formula: CERCLA ingredient RQ/% of that ingredient in the product.

Section XVI – Other Information

Prepared by: B.W.

HMIS Ratings: Health=3, Flammability = 1, Reactivity=1

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Distributed by:

Green Mountain International Inc.

235 Pigeon Street, Waynesville, NC 28786

Ph: 800-942-5151 Fx: 888-632-5360

Int'l: 828-456-9970 Fx: 828-456-9699

www.mountaingrout.com