



Material Safety Data Sheet

In-Force (Bulk)

MSDS ID: 438B

*** Section 1 - Chemical Product and Company Identification ***

Part Number: 4381, 43855

Product Use: General Purpose Penetrant

Manufacturer Information

BG Products Inc.
701 S. Wichita Street
Wichita, KS 67213

Phone: (316) 265-2686
Fax: (316) 265-0718
Emergency # 1-800-424-9300 (CHEMTREC)

*** Section 2 - Hazards Identification ***

Emergency Overview

DANGER

- FLAMMABLE! Vapors may cause flash fire or explosion. Do not use or store near flames, sparks, or hot surfaces.
- VAPOR HARMFUL! Avoid prolonged breathing of fumes. Use with adequate ventilation.
- EYE AND SKIN IRRITANT! Avoid contact with eyes, skin, and clothing.
- This product may be harmful if it is swallowed.

HMIS Ratings: Health: 1 Fire: 3 Physical Hazard: 0 Pers. Prot.: B

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

*** Section 3 - Composition / Information on Ingredients ***

CAS #	Component	Percent
8008-20-6	PETROLEUM BASE OIL	15-40
Proprietary	Olefin Polymer	3-7
141-78-6	ETHYL ACETATE	3-7
64742-65-0	MINERAL OIL	1-5
64742-52-5	HYDROTREATED HEAVY NAPHTHENIC PETROLEUM DISTILLATES	1-5

Component Information

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication). This product is considered a controlled product under the Canadian Controlled Products Regulations (CPR).

*** Section 4 - First Aid Measures ***

First Aid: Eyes

In case of contact, immediately flush eyes with large amounts of water, continuing to flush for 15 minutes. If irritation persists get medical attention.

First Aid: Skin

For skin contact flush with large amounts of water while removing contaminated clothing. If irritation persists, get medical attention.

First Aid: Ingestion

If ingested, get immediate medical attention. Do not induce vomiting unless instructed to do so by medical personnel.

First Aid: Inhalation

Move person to non-contaminated air. Give artificial respiration if not breathing. Call a physician if symptoms develop or persist.



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*** Section 5 - Fire Fighting Measures ***

General Fire Hazards

See Section 9 for Flammability Properties.
Keep away from heat, sparks, or open flame.

Hazardous Combustion Products

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Extinguishing Media

Dry chemical, foam, carbon dioxide.

Fire Fighting Equipment/Instructions

Fire fighters should wear full-face, self contained breathing apparatus and impervious protective clothing.
Fire fighters should avoid inhaling any combustion products.

NFPA Ratings: Health: 1 Fire: 3 Reactivity: 0 Other: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

*** Section 6 - Accidental Release Measures ***

Containment Procedures

Contain the discharged material. Remove sources of ignition.

Clean-Up Procedures

Wear appropriate protective equipment and clothing during clean-up. Absorb spill with inert material.
Shovel material into appropriate container for disposal.

Evacuation Procedures

Isolate area. Keep unnecessary personnel away. In case of large spills, follow all facility emergency response procedures.

Special Procedures

Wear appropriate personal protective equipment.

*** Section 7 - Handling and Storage ***

Handling Procedures

Avoid getting this material into contact with your skin and eyes. Wash thoroughly after handling. Use this product with adequate ventilation. Keep container closed.

Storage Procedures

Do not store this material in open or unlabeled containers. Store this product in air-tight containers away from sources of heat and light.

*** Section 8 - Exposure Controls / Personal Protection ***

A: Component Exposure Limits

PETROLEUM BASE OIL (8008-20-6)

ACGIH: 200 mg/m³ TWA (application restricted to conditions in which there are negligible aerosol exposures)

Skin - potential significant contribution to overall exposure by the cutaneous route

NIOSH: 100 mg/m³ TWA



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ETHYL ACETATE (141-78-6)

ACGIH: 400 ppm TWA
OSHA: 400 ppm TWA; 1400 mg/m³ TWA
NIOSH: 400 ppm TWA; 1400 mg/m³ TWA

B: Canadian Provincial Exposure Limits

PETROLEUM BASE OIL (8008-20-6)

British Columbia: 200 mg/m³ TWA (as total hydrocarbon vapour)
Columbia: Skin notation
Manitoba: 200 mg/m³ TWA (application restricted to conditions in which there are negligible aerosol exposures)
Nova Scotia: 200 mg/m³ TWA (application restricted to conditions in which there are negligible aerosol exposures)
Ontario: 200 mg/m³ TWAEV (as total hydrocarbon vapour)
Absorption through skin, eyes, or mucous membranes

ETHYL ACETATE (141-78-6)

Alberta: 400 ppm TWA; 1440 mg/m³ TWA
British Columbia: 150 ppm TWA
Columbia: 400 ppm TWA
Manitoba: 400 ppm TWA
New Brunswick: 400 ppm TWA; 1440 mg/m³ TWA
NW Territories: 400 ppm TWA; 1441 mg/m³ TWA
500 ppm STEL; 1801 mg/m³ STEL
Nova Scotia: 400 ppm TWA
Nunavut: 400 ppm TWA; 1441 mg/m³ TWA
500 ppm STEL; 1801 mg/m³ STEL
Ontario: 400 ppm TWAEV; 1440 mg/m³ TWAEV
Quebec: 400 ppm TWAEV; 1440 mg/m³ TWAEV
Saskatchewan: 1440 mg/m³ TWA; 400 ppm TWA
1800 mg/m³ STEL; 500 ppm STEL
Yukon: 400 ppm TWA; 1400 mg/m³ TWA
400 ppm STEL; 1400 mg/m³ STEL

Engineering Controls

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

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear safety glasses; chemical goggles (if splashing is possible).

Personal Protective Equipment: Skin

Use appropriate hand protection.

Personal Protective Equipment: Respiratory

Use NIOSH approved respirator with cartridge, air line, or SCBA as appropriate based on workplace exposure evaluations.

Personal Protective Equipment: General

Use good industrial hygiene practices in handling this material.



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*** Section 9 - Physical & Chemical Properties ***

Appearance:	Oily Green	Odor:	Solvent
Physical State:	Liquid	Flash Point:	-4.44°C (24°F)
Flash Point Method:	N/A	Boiling Point:	76°C (169°F)
Melting Point:	Not Determined	Specific Gravity:	0.8807
Solubility (H2O):	Negligible	Vapor Pressure:	Not Available
Vapor Density:	Heavier Than Air	Auto Ignition:	Not Available
Lower Flammability Limit:	Not Available	Upper Flammability Limit:	Not Available
pH:	Not Available	Freezing Point:	0°C (32°F)

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability

Stable under normal conditions.

Chemical Stability: Conditions to Avoid

Keep away from heat, ignition sources and incompatible materials. Avoid strong oxidizing agents.

Incompatibility

This product may react with oxidizing agents. Strong oxidizing agents (peroxides, chlorine, strong acids).

Hazardous Decomposition

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Possibility of Hazardous Reactions

Will not occur.

*** Section 11 - Toxicological Information ***

Acute Dose Effects

A: General Product Information

An LD50 value for this product has not been determined.

B: Component Analysis - LD50/LC50

PETROLEUM BASE OIL (8008-20-6)

Inhalation LC50 Rat: >5.28 mg/L/4H; Oral LD50 Rat: >5000 mg/kg; Dermal LD50 Rabbit: >2000 mg/kg

ETHYL ACETATE (141-78-6)

Oral LD50 Rat: 5620 mg/kg; Dermal LD50 Rabbit: >20 mL/kg

HYDROTREATED HEAVY NAPHTHENIC PETROLEUM DISTILLATES (64742-52-5)

Inhalation LC50 Rat: 2.18 mg/L/4H; Oral LD50 Rat: >5000 mg/kg; Dermal LD50 Rabbit: >2000 mg/kg

MINERAL OIL (64742-65-0)

Inhalation LC50 Rat: 2.18 mg/L/4H; Oral LD50 Rat: >5000 mg/kg; Dermal LD50 Rabbit: >2000 mg/kg

Carcinogenicity

A: General Product Information

No carcinogenicity data available for this product.

B: Component Carcinogenicity

PETROLEUM BASE OIL (8008-20-6)

ACGIH: A3 - Confirmed animal carcinogen with unknown relevance to humans



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***** Section 12 - Ecological Information *****

Ecotoxicity

No information available for the product.

***** Section 13 - Disposal Considerations *****

Waste Disposal Instructions

Dispose of in accordance with all applicable Federal, State, Provincial, and local regulations.

***** Section 14 - Transportation Information *****

US DOT Information

Shipping Name: Flammable Liquid, n.o.s. (contains Petroleum Base Oil and Ethyl Acetate)

UN/NA #: 1993 **Hazard Class:** 3 **Packing Group:** II

Required Label(s): Flammable

IMDG Information

Shipping Name: Flammable Liquid, n.o.s. (contains Petroleum Base Oil and Ethyl Acetate)

UN #: 1993 **Hazard Class:** 3 **Packing Group:** II **Flash Point:** -4.44°C

Required Label(s): Flammable

IATA Information

Shipping Name:

4381: Flammable Liquid, n.o.s. (contains Petroleum Base Oil and Ethyl Acetate)

UN #: 1993 **Hazard Class:** 3 **Packing Group:** II **Flash Point:** -4.44°C

Required Label(s): Flammable

4385 – CARGO AIRCRAFT ONLY:

Flammable Liquid, n.o.s. (contains Petroleum Base Oil and Ethyl Acetate)

UN #: 1993 **Hazard Class:** 3 **Packing Group:** II **Flash Point:** -4.44°C

Required Label(s): Flammable, Cargo Aircraft Only

43855: CAN NOT SHIP BY AIR

***** Section 15 - Regulatory Information *****

US Federal Regulations

Components of this product have been checked against the non-confidential TSCA inventory by CAS Registry Number. Components not identified on this non-confidential inventory are exempt from listing (i.e. as polymers) or are listed on the confidential inventory as declared by the supplier.

A: Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

ETHYL ACETATE (141-78-6)

CERCLA: 5000 lb final RQ; 2270 kg final RQ

B: Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
PETROLEUM BASE OIL	8008-20-6	Yes	DSL	EINECS
ETHYL ACETATE	141-78-6	Yes	DSL	EINECS
HYDROTREATED HEAVY NAPHTHENIC PETROLEUM DISTILLATES	64742-52-5	Yes	DSL	EINECS



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MINERAL OIL	64742-65-0	Yes	DSL	EINECS
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State Regulations

Other state regulations may apply. Check individual state requirements.

Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
PETROLEUM BASE OIL	8008-20-6	No	Yes	No	Yes	Yes	Yes
ETHYL ACETATE	141-78-6	Yes	Yes	Yes	Yes	Yes	Yes

Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
ETHYL ACETATE	141-78-6	1 %

* * * Section 16 - Other Information * * *

Other Information

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind, express or implied, and we assume no responsibility for any loss, damage, or expense, direct or consequential, arising out of their use. You must notify each person to whom this mixture or trade name product is sold. This statement must not be detached. Any copy or redistribution of the Material Safety Data Sheet shall include this statement.

Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists; CAS = Chemical Abstract Services; CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act; CFR = Code of Federal Regulations; CPR = Controlled Product Regulations; DOT = Department of Transportation; DSL = Domestic Substances List; EEC = European Economic Community; EINECS = European Inventory of Existing Commercial Chemical Substances; ELINCS = European List of Notified Chemical Substances; EPA = Environmental Protection Agency; HMIS = Hazardous Materials Information System; IARC = International Agency for Research on Cancer; IATA = International Air Transport Association; IDL = Ingredient Disclosure List; IMDG = International Maritime Dangerous Goods; LC50 = Lethal Concentration 50%; LD50 = Lethal Dose 50%; NDSL = Non-Domestic Substances List; NFPA = National Fire Protection Agency; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; SARA = Superfund Amendments and Reauthorization Act; SCBA = Self Contained Breathing Apparatus; TSCA = Toxic Substance Control Act; WHMIS = Workplace Hazardous Materials Information System.

Contact: Kolin Anglin, Environmental Coordinator

Contact Phone: 316-265-2686

End of MSDS 438B