



Material Safety Data Sheet

INJECT-A-FLUSH® Injector Cleaner (Aerosol)

MSDS ID: 408

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

Part Number: 408 (Aerosol)

Product Use: Fuel System Cleaner

Manufacturer Information

BG Products Inc.
701 S. Wichita Street
Wichita, KS 67213 USA
www.bgprod.com

Phone: (800) 961-6228 or (316) 265-2686
Fax: (316) 265-1082
Emergency : 1-800-424-9300 (CHEMTREC)

*** Section 2 - Hazards Identification ***

Emergency Overview

DANGER

- CONTENTS UNDER PRESSURE.
- EXTREMELY 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.
- HARMFUL OR FATAL IF SWALLOWED. This product cannot be made nonpoisonous! This product may cause blindness if it is swallowed.
- EYE AND SKIN IRRITANT. Avoid contact with eyes, skin, and clothing.

HMIS Ratings: Health: 2 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
142-82-5	Heptane (n-)	15-40
8032-32-4	Light Aliphatic Solvent Naphtha	10-30
1330-20-7	Xylenes	10-30
67-63-0	Isopropyl Alcohol	7-13
100-41-4	Ethyl benzene	3-7

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 ***

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.

Skin

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

Ingestion

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



Material Safety Data Sheet

INJECT-A-FLUSH® Injector Cleaner (Aerosol)

MSDS ID: 408

Inhalation

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

*** 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: 2 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

Heptane (n-) (142-82-5)



Material Safety Data Sheet

INJECT-A-FLUSH® Injector Cleaner (Aerosol)

MSDS ID: 408

ACGIH: 400 ppm TWA
500 ppm STEL
OSHA: 400 ppm TWA; 1600 mg/m³ TWA
500 ppm STEL; 2000 mg/m³ STEL
NIOSH: 85 ppm TWA; 350 mg/m³ TWA
440 ppm Ceiling (15 min); 1800 mg/m³ Ceiling (15 min)

Xylenes (1330-20-7)

ACGIH: 100 ppm TWA
150 ppm STEL
OSHA: 100 ppm TWA; 435 mg/m³ TWA
150 ppm STEL; 655 mg/m³ STEL

Light Aliphatic Solvent Naphtha (8032-32-4)

ACGIH: 300 ppm TWA
OSHA: 300 ppm TWA; 1350 mg/m³ TWA
400 ppm STEL; 1800 mg/m³ STEL
NIOSH: 350 mg/m³ TWA
1800 mg/m³ Ceiling (15 min)

Isopropyl Alcohol (67-63-0)

ACGIH: 200 ppm TWA
400 ppm STEL
OSHA: 400 ppm TWA; 980 mg/m³ TWA
500 ppm STEL; 1225 mg/m³ STEL
NIOSH: 400 ppm TWA; 980 mg/m³ TWA
500 ppm STEL; 1225 mg/m³ STEL

Ethyl Benzene (100-41-4)

ACGIH: 100 ppm TWA
125 ppm STEL
OSHA: 100 ppm TWA; 435 mg/m³ TWA
125 ppm STEL; 545 mg/m³ STEL
NIOSH: 100 ppm TWA; 435 mg/m³ TWA
125 ppm STEL; 545 mg/m³ STEL

B: Canadian Provincial Exposure Limits

Heptane (n-) (142-82-5)

Alberta: 400 ppm TWA; 1640 mg/m³ TWA
500 ppm STEL; 2050 mg/m³ STEL
British Columbia: 400 ppm TWA
500 ppm STEL
Manitoba: 400 ppm TWA
500 ppm STEL
New Brunswick: 400 ppm TWA; 1640 mg/m³ TWA
500 ppm STEL; 2050 mg/m³ STEL
NW Territories: 400 ppm TWA; 1640 mg/m³ TWA
500 ppm STEL; 2049 mg/m³ STEL
Nova Scotia: 400 ppm TWA
500 ppm STEL
Nunavut: 400 ppm TWA; 1640 mg/m³ TWA
500 ppm STEL; 2049 mg/m³ STEL
Ontario: 400 ppm TWAEV; 1635 mg/m³ TWAEV
500 ppm STEV; 2045 mg/m³ STEV
Quebec: 500 ppm STEV; 2050 mg/m³ STEV
400 ppm TWAEV; 1640 mg/m³ TWAEV
Saskatchewan: 1640 mg/m³ TWA; 400 ppm TWA
2050 mg/m³ STEL; 500 ppm STEL
Yukon: 400 ppm TWA; 1600 mg/m³ TWA



Material Safety Data Sheet

INJECT-A-FLUSH® Injector Cleaner (Aerosol)

MSDS ID: 408

500 ppm STEL; 2000 mg/m3 STEL

Xylenes (1330-20-7)

Alberta: 100 ppm TWA; 434 mg/m3 TWA
150 ppm STEL; 651 mg/m3 STEL
British Columbia: 100 ppm TWA
150 ppm STEL
Manitoba: 100 ppm TWA
150 ppm STEL
New Brunswick: 100 ppm TWA; 434 mg/m3 TWA
150 ppm STEL; 651 mg/m3 STEL
NW Territories: 100 ppm TWA; 434 mg/m3 TWA
150 ppm STEL; 652 mg/m3 STEL
Skin notation
Nova Scotia: 100 ppm TWA
150 ppm STEL
Nunavut: 100 ppm TWA; 434 mg/m3 TWA
150 ppm STEL; 652 mg/m3 STEL
Skin notation
Ontario: 100 ppm TWAEV; 435 mg/m3 TWAEV
150 ppm STEV; 650 mg/m3 STEV
Quebec: 150 ppm STEV; 651 mg/m3 STEV
100 ppm TWAEV; 434 mg/m3 TWAEV
Saskatchewan: 434 mg/m3 TWA; 100 ppm TWA
651 mg/m3 STEL; 150 ppm STEL
Yukon: 100 ppm TWA; 435 mg/m3 TWA
150 ppm STEL; 650 mg/m3 STEL
Skin notation

Light Aliphatic Solvent Naphtha (8032-32-4)

Alberta: 300 ppm TWA; 1398 mg/m3 TWA
British Columbia: 350 mg/m3 TWA
Manitoba: 300 ppm TWA
New Brunswick: 300 ppm TWA; 1370 mg/m3 TWA
NW Territories: 300 ppm TWA; 1350 mg/m3 TWA
400 ppm STEL; 1800 mg/m3 STEL
Nova Scotia: 300 ppm TWA
Nunavut: 300 ppm TWA; 1350 mg/m3 TWA
400 ppm STEL; 1800 mg/m3 STEL
Ontario: 1350 mg/m3 TWAEV
Quebec: 300 ppm TWAEV; 1370 mg/m3 TWAEV
Saskatchewan: 1370 mg/m3 TWA; 300 ppm TWA
1712 mg/m3 STEL; 375 ppm STEL

Isopropyl Alcohol (67-63-0)

Alberta: 400 ppm TWA; 983 mg/m3 TWA
500 ppm STEL; 1230 mg/m3 STEL
British Columbia: 200 ppm TWA
150 ppm STEL
Manitoba: 200 ppm TWA
400 ppm STEL
New Brunswick: 400 ppm TWA; 983 mg/m3 TWA
500 ppm STEL; 1230 mg/m3 STEL
NW Territories: 400 ppm TWA; 983 mg/m3 TWA
500 ppm STEL; 1228 mg/m3 STEL
Skin notation
Nova Scotia: 200 ppm TWA
400 ppm STEL



Material Safety Data Sheet

INJECT-A-FLUSH® Injector Cleaner (Aerosol)

MSDS ID: 408

Nunavut: 400 ppm TWA; 983 mg/m³ TWA
500 ppm STEL; 1228 mg/m³ STEL
Skin notation
Ontario: 200 ppm TWAEV
400 ppm STEV
Quebec: 500 ppm STEV; 1230 mg/m³ STEV
400 ppm TWAEV; 983 mg/m³ TWAEV
Saskatchewan: 983 mg/m³ TWA; 400 ppm TWA
1230 mg/m³ STEL; 500 ppm STEL
Yukon: 400 ppm TWA; 980 mg/m³ TWA
500 ppm STEL; 1225 mg/m³ STEL
Skin notation

Ethyl Benzene (100-41-4)

Alberta: 100 ppm TWA; 434 mg/m³ TWA
125 ppm STEL; 543 mg/m³ STEL
British Columbia: 100 ppm TWA
Manitoba: 125 ppm STEL
New Brunswick: 100 ppm TWA; 434 mg/m³ TWA
125 ppm STEL; 543 mg/m³ STEL
NW Territories: 100 ppm TWA; 434 mg/m³ TWA
125 ppm STEL; 542 mg/m³ STEL
Nova Scotia: 100 ppm TWA
125 ppm STEL
Nunavut: 100 ppm TWA; 434 mg/m³ TWA
125 ppm STEL; 542 mg/m³ STEL
Ontario: 100 ppm TWAEV; 435 mg/m³ TWAEV
125 ppm STEV; 540 mg/m³ STEV
Quebec: 125 ppm STEV; 543 mg/m³ STEV
100 ppm TWAEV; 434 mg/m³ TWAEV
Saskatchewan: 435 mg/m³ TWA; 100 ppm TWA
543 mg/m³ STEL; 125 ppm STEL
Yukon: 100 ppm TWA; 435 mg/m³ TWA
125 ppm STEL; 545 mg/m³ STEL

Engineering Controls

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

PERSONAL PROTECTIVE EQUIPMENT

General

Use good industrial hygiene practices in handling this material. Avoid inhalation of mists/vapors and contact with skin and eyes.

Skin

Use appropriate hand protection.

Respiratory

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

Eyes

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



Material Safety Data Sheet

INJECT-A-FLUSH® Injector Cleaner (Aerosol)

MSDS ID: 408

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

Appearance:	Yellow	Odor:	Solvent
Physical State:	Liquid	Flash Point:	Not Determined
Flash Point Method:	Not Determined	Boiling Point:	Not Determined
Melting Point:	Not Determined	Specific Gravity:	0.4462
Bulk Density:	3.724 lbs/gal	Solubility (H2O):	Negligible
Vapor Pressure:	Not Determined	Vapor Density:	Not Determined
Percent Volatile:	76.26%	Volatile Organic Content:	2.84 lbs/gal
Auto Ignition:	Not Determined	Lower Flammability Limit:	0.8%
Upper Flammability Limit:	12%	pH:	Not Determined

*** 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

Heptane (n-) (142-82-5)

Inhalation LC50 Rat: 103 g/m³/4H

Xylenes (1330-20-7)

Inhalation LC50 Rat: 5000 ppm/4H; Oral LD50 Rat: 4300 mg/kg; Dermal LD50 Rabbit: >1700 mg/kg

Light Aliphatic Solvent Naphtha (8032-32-4)

Inhalation LC50 Rat: 3400 ppm/4H

Isopropyl Alcohol (67-63-0)

Inhalation LC50 Rat: 72.6 mg/L/4H; Oral LD50 Rat: 4396 mg/kg; Dermal LD50 Rat: 12800 mg/kg; Dermal LD50 Rabbit: 12870 mg/kg

Ethyl benzene (100-41-4)

Inhalation LC50 Rat: 17.2 mg/L/4H; Oral LD50 Rat: 3500 mg/kg; Dermal LD50 Rabbit: 15354 mg/kg

Carcinogenicity

A: General Product Information



Material Safety Data Sheet

INJECT-A-FLUSH® Injector Cleaner (Aerosol)

MSDS ID: 408

No carcinogenicity data available for this product.

B: Component Carcinogenicity

Xylenes (1330-20-7)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999], Monograph 47 [1989] (Group 3 (not classifiable))

Light Aliphatic Solvent Naphtha (8032-32-4)

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

Isopropyl Alcohol (67-63-0)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999], Supplement 7 [1987], Monograph 15 [1977] (Group 3 (not classifiable))

Ethyl benzene (100-41-4)

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

IARC: Monograph 77 [2000] (Group 2B (possibly carcinogenic to humans))

*** 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: Consumer Commodity, ORM-D

IMDG Information

Shipping Name: Aerosol, Flammable

UN #: 1950 Hazard Class: 2.1

Required Label(s): Limited Quantity

IATA Information

Shipping Name: Aerosol, Flammable

UN #: 1950 Hazard Class: 2.1

Required Label(s): Limited Quantity

*** 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).

Xylenes (1330-20-7)



Material Safety Data Sheet

INJECT-A-FLUSH® Injector Cleaner (Aerosol)

MSDS ID: 408

SARA 313: 1.0 % de minimis concentration
CERCLA: 100 lb final RQ; 45.4 kg final RQ

Isopropyl Alcohol (67-63-0)

SARA 313: 1.0 % de minimis concentration (only if manufactured by the strong acid process, no supplier notification)

Ethyl benzene (100-41-4)

SARA 313: 0.1 % de minimis concentration
CERCLA: 1000 lb final RQ; 454 kg final RQ

B: Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Heptane (n-)	142-82-5	Yes	DSL	EINECS
Xylenes	1330-20-7	Yes	DSL	EINECS
LIGHT ALIPHATIC SOLVENT NAPHTHA	8032-32-4	Yes	DSL	EINECS
ISOPROPYL ALCOHOL	67-63-0	Yes	DSL	EINECS
Ethyl benzene	100-41-4	Yes	DSL	EINECS

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
Heptane (n-)	142-82-5	Yes	Yes	Yes	Yes	Yes	Yes
Xylenes	1330-20-7	Yes	Yes	Yes	Yes	Yes	Yes
Light aliphatic solvent naphtha	8032-32-4	No	No	Yes	Yes	Yes	No
Isopropyl alcohol	67-63-0	Yes	Yes	Yes	Yes	Yes	Yes
Ethyl benzene	100-41-4	Yes	Yes	Yes	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

Component Analysis - WHMIS IDL

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

Component	CAS #	Minimum Concentration
Heptane (n-)	142-82-5	1 %
LIGHT ALIPHATIC SOLVENT NAPHTHA	8032-32-4	1 %
ISOPROPYL ALCOHOL	67-63-0	1 %
Ethyl benzene	100-41-4	0.1 %

*** 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 =



Material Safety Data Sheet

INJECT-A-FLUSH® Injector Cleaner (Aerosol)

MSDS ID: 408

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 Information:

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End of MSDS 408