SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier — **Gunk GDI Intake Valve Cleaner**

Other means of identification

SDS Number	GDI-11
Part Number	GDI-11

Recommended Use

Identified Use(s)	Automotive Intake Valve Cleaner
Uses Advised Against	None known

Manufacturer/Importer/Supplier/Distributor Information

Company Identification	B'laster LLC 8500 Sweet Valley Drive Valley View, OH 44125-USA
Telephone	(216) 901-8500
Fax	(216) 901-5801
Website	www.blastercorp.com

Emergency telephone number

Emergency Phone No.	CHEMTREC 24 hr. 1-800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA HCS (29 CFR 1910.1200) — Flam. Aerosol 1; Liquefied gas; Skin Irrit. 2; STOT SE 3; Asp. Tox. 1

Label elements

Hazard Symbol

Signal word(s) — **DANGER**

Hazard Statement(s)

Extremely flammable aerosol.

Contains gas under pressure; may explode if heated.

Causes skin irritation. Repeated exposure may cause skin dryness or cracking.

May cause drowsiness or dizziness.

May be fatal if swallowed and enters airways.

Precautionary Statement(s)	Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Use only outdoors or in a well-ventilated area. Avoid breathing spray. Wear protective gloves/eye protection. Wash hands and exposed skin after use. Protect from sunlight and do not expose to temperatures exceeding 50 ºC/122 ºF.
Other hazards	Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredient(s)	% wt. *	CAS No.	Hazard classification
Xylene*	40-50	1330-20-7	Flam. Liq. 3; H226 Eye Irrit. 2; H319 Skin Irrit. 2; H315 Asp. Tox. 1; H304 STOT SE 3; H335
Propane	10 - 15	74-98-6	Flam. Gas 1; H220 Liquefied gas; H280
Butane	6 - 12	106-97-8	Flam. Gas 1; H220 Liquefied gas; H280
Isopropanol	6-12	67-63-0	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336
Butyl Cellosolve	7-12	111-76-2	Flam. Liq. 4; H227 Acute Tox. 4: H302 Eye Irrit. 2; H319 Skin Irrit. 2; H315
Monoethanolamine	<0.5	141-43-5	Acute toxicity, Oral H302 Acute Tox. 4; H332 Acute toxicity, Dermal H312 Skin Corr. 1B; H314 Aquatic Chronic 3; H412 STOT SE 3: H335
Polyether amine	<0.5	Polymer	Eye Irrit. 2; H319 Skin Irrit. 2; H315 Acute toxicity, Oral H302

Additional Information – * Ethylbenzene (CAS No. 100-41-4)

* The exact percentage withheld as a trade secret in accordance with 29 CFR 1910.1200.

SECTION 4: FIRST AID MEASURES

Description of first aid measures

Inhalation	Move person to fresh air. If breathing is labored, administer oxygen. If symptoms develop, obtain medical attention.
Skin Contact	Wash affected skin with soap and water. If irritation (redness, rash, blistering) develops, get medical attention.

Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Do not induce vomiting. Do not give anything by mouth to an unconscious person. Get immediate medical attention.
Most important symptoms and effects, both acute and delayed	May be fatal if swallowed and enters airways. Do NOT induce vomiting.
Indication of any immediate medical attention and special treatment needed	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

-Suitable Extinguishing Media -Unsuitable Extinguishing Media	Extinguish with carbon dioxide, dry chemical, foam or water spray. Do not use water jet.
Special hazards arising from the substance or mixture	Pressurised container: May burst if heated
Advice for fire-fighters	A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Keep containers cool by spraying with water if exposed to fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Eliminate sources of ignition. Avoid contact with skin and eyes. Avoid breathing spray. Wear protective gloves/eye protection.
Environmental precautions	Prevent liquid entering sewers, basements and work pits.
Methods and material for containment and cleaning up	Cover spills with inert absorbent material. Transfer to a container for disposal or recovery.
Reference to other sections	None
Additional Information	None

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling	Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Avoid breathing vapors.

Conditions for safe storage, including any incompatibilities

-Storage temperature	Store in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F.
-Incompatible materials	This product should be stored away from sources of strong heat or oxidizing chemicals.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

SUBSTANCE.	CAS No.	(8hr TWA)		(STEL)		Note:
		PEL (OSHA)	TLV (ACGIH)	PEL (OSHA)	TLV (ACGIH)	
2-Butoxy Ethanol	111-76-2	50 ppm	20 ppm	------	-----	Skin,A3
Xylene	1330-20-7	100 ppm	100 ppm	------	150 ppm	------
Ethylbenzene	100-41-4	100 ppm	20 ppm	------	------	A3
Isopropanol	67-63-0	400 ppm	200 ppm	500 ppm	400 ppm	-----
n-Butane	106-97-8	-----	250 ppm	-----	-----	-----
Propane	74-98-6	1000 ppm	Aspyx.#	-----	-----	------

Recommended monitoring method NIOSH 1500 (hydrocarbons, B.P. 36 - 126 ºC);

Exposure controls

Appropriate engineering controls Provide adequate ventilation to ensure that the occupational exposure limit is not exceeded.

Personal protection equipment

Eye/face protection

Wear protective eyewear (goggles, face shield, or safety glasses).

Skin protection (Hand protection/ Other)

Wear suitable gloves if prolonged skin contact is likely (Butyl rubber). Check with protective equipment manufacturer's data.

Respiratory protection

Normally no personal respiratory protection is necessary. In case of insufficient ventilation, wear suitable respiratory equipment. Check with protective equipment manufacturer's data.

Thermal hazards

Not normally required. Use gloves with insulation for thermal protection, when needed.

Environmental Exposure Controls Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Aerosol spray
Color.	Colourless
Odor	Slightly ethereal
Odor Threshold (ppm)	Not available
pH (Value)	Not available
Melting Point (°C) / Freezing Point (°C)	Not available.
Boiling point/boiling range (°C):	Not available.
Flash Point (°C)	--104 (-155 °F) - Propane
Evaporation Rate (Ethyl ether =1)	Not available.
Flammability (solid, gas)	Extremely flammable
Explosive Limit Ranges	2.1% - 9.5% v/v (Propane)
Vapor pressure (Pascal)	ca. 95 x 104 (Propane)
Vapor Density (Air=1)	ca. 1.56 @ 0 ºC (Propane)
Density (g/ml)	2.1% - 9.5% v/v (Propane)
Solubility (Water)	Not available

Solubility (Other)	Not available
Partition Coefficient (n-Octanol/water)	Not available
Auto Ignition Point (°C)	440 (1,1-Diflouroethane)
Decomposition Temperature (°C)	Not available
Kinematic Viscosity (cSt)	< 20.5
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Other information	Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions.
Chemical stability	Stable.
Possibility of hazardous reactions	None anticipated.
Conditions to avoid	Avoid contact with heat and ignition sources.
Incompatible materials	This product should be stored away from sources of strong heat or oxidizing chemicals.
Hazardous decomposition product(s)	Carbon monoxide, Carbon dioxide, Acrid smoke

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes: Inhalation**,** Skin Contact**,** Eye Contact

2-Butoxyethanol (CAS No. 111-76-2):

NOTE: Rodents shown to be more suceptible to the effects of hemolysis than are humans and guinea pigs, thus acute toxicity for guinea pigs considered more relevant for classification:

Acute toxicity	Oral: LD50 = 1400 mg/kg (guinea pig) Inhalation: LC0 (1-hr) > 3.1 mg/l (Vapour, guinea pig) Dermal: LD50 >2000 mg/kg (guinea pig)
Irritation/Corrosivity	Irritating to eyes and skin.
Sensitisation	It is not a skin sensitiser.
Repeated dose toxicity	Inadequate data available to make full assessment. Rodents shown to be more suceptible to the effects of hemolysis than are humans.
Carcinogenicity	NOAEL (Two year cancer study) < 125 ppm - Probably not carcinogenic to humans.

NTP	IARC	ACGIH	OSHA
No.	3	A3	No.

Mutagenicity	There is no evidence of mutagenic potential.
Toxicity for reproduction	NOAEL (parental , F1 and F2 generation) = 720 mg/kg bw/day

Isopropanol (CAS No. 67-63-0): Not to be expected

Acute toxicity	Oral: LD50 5840 = mg/kg (rat)
	Inhalation: LC50 > 10000 ppm (6-hr, rat, Vapour) May cause drowsiness or dizziness.
	Dermal: LD50 > 16.4 ml/kg
Irritation/Corrosivity	Causes serious eye irritation.
Sensitization	It is not a skin sensitiser.
Repeated dose toxicity	NOEC:500 ppm (104-week(s), rat) NOAEC: 5000 ppm (104-week(s), rat, Systemic effects)

Carcinogenicity No evidence of carcinogenicity.NOEL: 5000 ppm

NTP	IARC	ACGIH	OSHA	NIOSH
No.	No.	No.	No.	No.

Mutagenicity There is no evidence of mutagenic potential.
None anticipated

Xylenes (CAS No.1330-20-7)

Acute toxicity Oral LD50 = 3520 mg/kg (rat)
Dermal LD50 >5000 mg/kg (rabbit)
Inhalation LC50 = 27.6 mg/L (4 hour(s)) (rat) - Vapours may cause drowsiness and dizziness. May cause respiratory irritation.

Irritation / Corrosivity Causes eye irritation. Causes skin irritation. Repeated exposure may cause skin dryness or cracking.

Sensitisation It is not a skin sensitiser.

Repeated dose toxicity Oral NOAEL = 900 mg/kg/day (rat) (90-days)
Inhalation NOAEL $\geq$ 19,000 ppm (rat)

Carcinogenicity It is unlikely to present a carcinogenic hazard to man.*

NTP	IARC	ACGIH	OSHA	NIOSH
No.	No.	No.	No.	No.

Mutagenicity Negative

Toxicity for reproduction Negative

Other information: * Contains Ethylbenzene (CAS# 100-41-4) A3 - Confirmed Animal Carcinogen (ACGIH). Studies in animals have shown that repeated exposures to ethylbenzene produce cancer. However, in similar animal studies, mixed xylenes containing up to 17% residual ethylbenzene did not result in cancer. As such, this product has not been classified as a carcinogen.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

No Data available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.

SECTION 14: TRANSPORT INFORMATION

	U.S. DOT	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN number	1950	1950	1950
Proper Shipping Name	Aerosols, flammable	Aerosols, flammable	Aerosols, flammable
Transport hazard class(es)	2.1	2.1	2.1
Packing group	Not applicable	Not applicable	Not applicable
Environmental hazards	None assigned	None assigned	None assigned
Special precautions for user	None assigned	None assigned	None assigned

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

TSCA (Toxic Substance Control Act) - Inventory Status**:** All components listed or polymer exempt.

Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):

Chemical Name	CAS No.	Typical %wt.	RQ (Pounds)
m-Xylene	108-38-3	1 - 5	1000
o-Xylene	95-47-6	1 - 5	1000
Ethylbenzene	100-41-4	< 1.25	1000
p-Xylene	106-42-3	1 - 5	100

SARA 311/312 - Hazard Categories: See SECTION 2: HAZARDS IDENTIFICATION

SARA 313 - Toxic Chemicals (40 CFR 372):

Chemical Name	CAS No.	Typical %wt.
m-Xylene	108-38-3	1 - 5
o-Xylene	95-47-6	1 - 5
p-Xylene	106-42-3	1 - 5
Ethylbenzene	100-41-4	<1.45

SARA 302 - Extremely Hazardous Substances (40 CFR 355):

Chemical Name	CAS No.	Typical %wt.	TPQ (pounds)
None	----	----	----

California Proposition 65 List:

Chemical Name	CAS No.	Type of Toxicity
Ethylbenzene	100-41-4	Cancer

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.
Date of preparation: March 3, 2020

Hazard Statement(s) and Risk Phrases Listed in: SECTION 2:/ SECTION 3:

Hazard Statement(s)
- H220: Extremely flammable gas.
- H225: Highly flammable liquid and vapor.
- H226: Flammable liquid and vapour.
- H280: Contains gas under pressure; may explode if heated.
- H302: Harmful if swallowed.
- H304: May be fatal if swallowed and enters airways.
- H312: Harmful in contact with skin
- H314: Causes severe skin burns and eye damage.
- H315: Causes skin irritation.
- H319: Causes serious eye irritation
- H332: Harmful if inhaled.
- H335: May cause respiratory irritation.
- H336: May cause drowsiness or dizziness.
- H412: Harmful to aquatic life with long lasting effects.

Training advice: None.

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