

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name: GDI FUEL SYSTEM CLEANER

Other means of identification

Common Name: 30002
UN/ID No NA1993
Synonyms None
Product Categories Fuel additive

Recommended use of the chemical and restrictions on use

Sale and Use Restrictions Not applicable
Recommended Use Restricted to professional users.
Uses advised against Consumer use

Details of the supplier of the safety data sheet

Supplier Address
ACEL, LLC.
6826 Hill Park Dr. Suite #100
Lorton, VA 22079

Emergency telephone number

Company Phone Number ACEL, LLC. (888) 801-2507
Emergency Telephone CHEMTREC 1-800-424-9300

2. HAZARDS IDENTIFICATION**Classification**

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Vapors)	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Aspiration toxicity	Category 1
Flammable liquids	Category 4

Label elements**Emergency Overview****Danger****Hazard statements**

Harmful if swallowed
Harmful in contact with skin
Toxic if inhaled
Causes skin irritation
Causes severe eye irritation
May be fatal if swallowed and enters airways
Combustible liquid

**Appearance** Mobile**Physical state** Liquid**Odor** Solvent**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep cool

Precautionary Statements - Response

Specific measures (see prevention statements and warnings on this label)
Specific treatment (see response statements below and Section 4 of the Safety Data Sheet)

IF IN EYES: 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
IF ON SKIN: Wash with plenty of soap and water
Call a POISON CONTROL CENTER or doctor/physician if you feel unwell
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse
IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CONTROL CENTER or doctor/physician

IF SWALLOWED: Immediately call a POISON CONTROL CENTER or doctor/physician

Do not induce vomiting

Rinse mouth

In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Store in a dry place

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

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

Other information

- Toxic to aquatic life with long lasting effects

- Harmful to aquatic life

23.75 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight %	Trade Secret
Hydrotreated Light Petroleum Distillates	64742-47-8	30-45	*
2-Butoxyethanol	111-76-2	30-45	*
Benzenesulfonic Acid, C10-16-Alkyl Derivatives, compounds with 2-Propanamine	68584-24-7	20-40	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

Skin contact	Wash with plenty of soap and water. Call a POISON CONTROL CENTER or doctor/physician if you feel unwell. If skin irritation occurs: Get medical advice/ attention.
Inhalation	If inhaled: Remove to fresh air. Keep at rest position comfortable for breathing. Call a physician or Poison Control Center.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Flush eyes with water for 15 minutes. If eye irritation persists: Get medical advice/attention.
Ingestion	If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. Call a physician or Poison Control Center immediately.
Notes to Physician	Aspiration hazard if swallowed - can enter lungs and cause damage. Symptoms may be delayed.

Most important symptoms and effects, both acute and delayed

Symptoms	Coughing and/ or wheezing; Respiratory irritation; Stomach and intestinal upset (diarrhea, nausea, vomiting); Skin irritation, Causes skin burns, Eye irritation.
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Indication of any immediate medical attention and special treatment needed

Self-protection of the first aider	Avoid breathing vapors or mists. Avoid contact with skin.
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5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Use dry chemical, CO₂, water spray (fog) or alcohol resistant foam.

Small Fire	Dry chemical or CO ₂ .
Large Fire	Water spray or fog, Alcohol resistant foam.
Explosive properties:	May form explosive peroxides. May form explosive mixtures in presence of oxidizing substances (gas/dust). Risk of explosion if heated under confinement.

Specific hazards arising from the chemical

COMBUSTIBLE MATERIAL. Keep product and empty container away from heat and sources of ignition. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration. Vapors may travel to source of ignition and flash back. Flash back possible over considerable distance. The product causes irritation of eyes, skin and mucus membranes.

Hazardous combustion products Aldehydes, Hydrocarbons, Ammonia, Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x), Oxides of sulfur, Hydrogen sulfide.

Specific methods:

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge Yes. May be ignited by heat, sparks or flames.

Special firefighting procedures:

No action shall be taken involving any personal risk without suitable training. Evacuate surrounding areas. Combustible liquid. Keep away from heat, sparks and flame. The product is insoluble and floats on water. Use fine water spray to reduce vapors; do not put water directly on point of material release from container. Water mist may be used to cool closed containers. As in any fire,

wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Dike to collect large liquid spills. Do not allow run-off from fire-fighting to enter drains or water courses.

Component
2-Butoxyethanol
111-76-2 (30-45)

ACGIH - test
200

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

- Personal precautions:** Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Remove all sources of ignition. Use personal protective equipment. See Section 8 for information on appropriate personal protective equipment. Avoid contact with skin and eyes. Pay attention to flashback.
- For emergency responders** Use personal protection recommended in Section 8. Remove all sources of ignition. Ventilate the area. Be aware that gases can spread at ground level (heavier than air) and pay attention to the wind direction.

Environmental precautions

- Environmental precautions:** Avoid subsoil penetration. Do not flush into surface water or sanitary sewer system. Water runoff can cause environmental damage.

Methods and material for containment and cleaning up

- Methods for Containment** Dike far ahead of spill; use dry sand to contain the flow of material. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.
- Methods for clean-up:** Clean-up methods - small spillage: Ventilate the area. Soak up with inert absorbent material and dispose of as hazardous waste. Clean-up methods - large spillage: Large spills present a vapor explosion and liquid fire hazard; evacuate area and ensure response by personnel trained and equipped to respond to flammable material incident or off-site emergency responders or fire department.
- Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

- Handling:** Do not get in eyes, on skin, or on clothing. Avoid breathing vapors or mists. Protect from physical damage. Do not store at temperatures above 120°F (50°C). Keep containers tightly closed in a cool, well-ventilated place. Keep product and empty container away from heat and sources of ignition. Empty containers retain product residue and can be hazardous. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Do not pressurize, cut, weld, braze, solder, drill, grind, or expose these containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death.

Conditions for safe storage, including any incompatibilities

- Technical measures/precautions:** Mechanical ventilation required if used indoors on a continuous basis. Eye wash and safety shower should be easily accessible.
- Materials to avoid:** Chlorine, Strong bases, Strong oxidizing agents, Strong acids, Alkalis.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA Exposure Limits:	NIOSH IDLH
Hydrotreated Light Petroleum Distillates 64742-47-8	TWA: 200 ppm	TWA: 500 ppm	-
2-Butoxyethanol 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m ³ TWA: 25 ppm TWA: 120 mg/m ³	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m ³
Benzenesulfonic Acid, C10-16-Alkyl Derivatives, compounds with 2-Propanamine 68584-24-7	-	-	-

Appropriate engineering controls

Engineering measures: Mechanical ventilation required if used indoors on a continuous basis. Eye wash and safety shower should be easily accessible.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear normal work clothing, Chemical resistant gloves: (consult with the specific manufacturer to confirm performance). Additional body garments should be used based on task being performed. Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection Provide adequate ventilation. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. When using do not eat, drink or smoke. Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists. Use personal protective equipment as required. Wash face, hands and any exposed skin thoroughly after handling. Take off contaminated clothing and wash it before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Physical state	Liquid	Odor	Solvent
Appearance	Mobile	Odor threshold	No information available
Color	Blue, Light		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	N/A	Not applicable
Melting point/freezing point	No information available	
Boiling point / boiling range	> 99 °C / 210 °F	
Flash point	70 °C / 158 °F	
Evaporation rate		Pensky-Martens Closed Cup (PMCC)
Flammability (solid, gas)	No information available	Slower than ether
Flammability Limits in Air		
Upper flammability limit	No Data Available	
Lower flammability limit	No Data Available	
Vapor pressure	No Data Available	
Vapor density	Heavier than air	
Specific Gravity	0.88	
Water solubility	Insoluble in water	
Solubility in other solvents	No Data Available	
Partition coefficient	No Data Available	
Autoignition temperature	No Data Available	
Decomposition temperature	No Data Available	
Kinematic viscosity	No information available	
Dynamic viscosity	No Data Available	
Explosive properties	No Data Available	
Oxidizing properties	No Data Available	

Other information

Softening point	No Data Available
Molecular weight	No Data Available
VOC Content (%)	
VOC Content (%)	35.0
Density	Contains a VOC exempt solvent
Bulk density	0.88 g/cc
	No Data Available

10. STABILITY AND REACTIVITY**Reactivity**

Reactivity Stable under normal conditions.

Chemical stability

Possibility of Hazardous Reactions	May react with oxidizing agents. May form explosive peroxides.
Hazardous polymerization	Hazardous polymerization does not occur.

Conditions to avoid

Heat, flames and sparks. Do not distill to dryness.

Incompatible materials**Materials to avoid:** Chlorine, Strong bases, Strong oxidizing agents, Strong acids, Alkalis.**Hazardous Decomposition Products****Hazardous Decomposition Products** Aldehydes, Hydrocarbons, Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides

(NOx), Ammonia, Sulfur oxides (SOx), Hydrogen sulfide.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Product Information	Harmful in contact with skin and if swallowed. Toxic if inhaled. Causes skin irritation. Causes severe eye irritation. May be fatal if swallowed and enters airways.
Inhalation	Toxic by inhalation. Causes respiratory tract irritation.
Eye contact	Causes severe eye irritation.
Skin Contact	Harmful in contact with skin. May be absorbed through the skin in harmful amounts. Prolonged skin contact may defat the skin and produce dermatitis.
Ingestion	May be fatal if swallowed and enters airways. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrotreated Light Petroleum Distillates 64742-47-8	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.2 mg/L (Rat) 4 h
2-Butoxyethanol 111-76-2	= 470 mg/kg (Rat)	= 435 mg/kg (Rabbit)	= 450 ppm (Rat) 4 h = 486 ppm (Rat) 4 h
Benzenesulfonic Acid, C10-16-Alkyl Derivatives, compounds with 2-Propanamine 68584-24-7	-	-	-

Information on toxicological effects**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

Sensitization	No Data Available.
Mutagenic effects:	No information available.
Carcinogenicity	Category 3: Not Classifiable.

Chemical Name	ACGIH	IARC	NTP	OSHA
2-Butoxyethanol 111-76-2		Group 3		

Reproductive toxicity	2-Butoxyethanol (CAS#111-76-2): Experiments have shown reproductive toxicity effects on laboratory animals.
STOT - single exposure	Not classified.
STOT - repeated exposure	Not classified.
Chronic toxicity	Prolonged skin contact may defat the skin and produce dermatitis. Acute or chronic exposure to this material (or its components) may cause systemic toxicity, including adverse effects to the following: kidney, liver, spleen, adrenals, thymus, and central nervous system.
Target Organ Effects	Kidney, Liver, Spleen, Adrenal gland, Thymus, Blood.
Neurological effects	Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
Aspiration hazard	May be fatal if swallowed and enters airways.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity	23.75 % of the mixture consists of ingredient(s) of unknown toxicity
The following values are calculated based on chapter 3.1 of the GHS document .	
ATEmix (oral)	933 mg/kg
ATEmix (dermal)	1481 mg/kg
ATEmix (inhalation-dust/mist)	3.3 mg/l
ATEmix (inhalation-vapor)	9.8 mg/l

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Chronic Aquatic Toxicity: Very toxic to aquatic life with long lasting effects. Acute Aquatic Toxicity: Harmful to aquatic life.

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Hydrotreated Light Petroleum Distillates 64742-47-8		45: 96 h Pimephales promelas mg/L LC50 flow-through 2.2: 96 h Lepomis macrochirus mg/L LC50 static 2.4: 96 h Oncorhynchus mykiss mg/L LC50 static		
2-Butoxyethanol 111-76-2		1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50		1000: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

Bioaccumulative potential.

Mobility

The product is insoluble and floats on water.

Chemical Name	Partition coefficient
2-Butoxyethanol 111-76-2	0.83

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Disposal of wastes**

Dispose of in accordance with federal, state and local regulations.

Contaminated packaging

Do not reuse container. Dispose of in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

Limited quantity (LQ) < 5 Liters

DOT

UN/ID No NA1993
Proper Shipping Name: Combustible liquids, n.o.s. (2-Butoxy Ethanol)
Hazard Class COMB. LIQ.
Packing Group: III
Emergency Response Guide Number 128

IATA

Not regulated

IMDG

Not regulated

15. REGULATORY INFORMATION**International Inventories****Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS Number	Weight %	SARA 313 - Threshold Values %
2-Butoxyethanol 111-76-2	111-76-2	30-45	1.0 % de minimis concentration

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

State Regulations (RTK)**California Proposition 65**

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm:

Chemical Name	CAS Number	California Proposition 65
Ethylene glycol	107-21-1	Developmental
Ethylbenzene	100-41-4	Carcinogen

U.S. State Right-to-Know Regulations**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

NFPA Rating

Health hazards 2

Flammability 2

Instability 0

Physical and Chemical Properties -

HMIS Rating

Health hazards 2*

Flammability 2

Physical hazards 0

Personal protection C

Chronic Hazard Star Legend

** = Chronic Health Hazard*

Prepared by

Environmental Health and Safety Department

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12-18-2019

Revision Note

This data sheet contains changes from the previous version in section(s): 1.

Disclaimer

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.

End of Safety Data Sheet