



Fuel Power

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SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

Product identifier used on the label

: **Fuel Power**

Other means of identification : 90100, 00102P, 00103

Recommended use of the chemical and restrictions on use

: Fuel system treatment
No restrictions on use known.

Chemical family

: Ethylene glycol monobutyl ether

Name, address, and telephone number
of the supplier:

FPPF Chemical Company, Inc.

100 Dingens St.
Buffalo, NY, USA
14206

Supplier's Telephone # : (800) 735 3773

24 Hr. Emergency Tel # : PERS: North America 1-800-633-8253; International : +1-801-629-0667
Contract No.: 8027

SECTION 2. HAZARDS IDENTIFICATION

Classification of the chemical

Clear to cloudy liquid. Amber liquid.

This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Classification

Flammable Liquid - Category 4

Acute toxicity, oral - Category 4

Acute toxicity, dermal - Category 3

Acute Toxicity, inhalation - Category 3 (vapor)

Skin Corrosion/Irritation - Category 2

Serious eye damage/eye irritation Category 2A

Label elements

Hazard pictogram(s)



Signal Word

DANGER!

Hazard statement(s)

Combustible liquid.

Harmful if swallowed.

Toxic if inhaled.

Toxic in contact with skin.

Causes skin irritation.

Causes serious eye irritation.



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Precautionary statement(s)

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

In case of fire, use water fog, dry chemical, CO₂ or 'alcohol' foam.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/physician if you feel unwell.

If skin irritation occurs: get medical advice/attention. Take off immediately all contaminated clothing and wash it before reuse.

If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor.

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.

Store in well-ventilated place. Keep container closed. Keep cool. Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards

Other hazards which do not result in classification: May be sensitive to static discharge. Burning produces obnoxious and toxic fumes. Ingestion can cause gastrointestinal irritation, nausea, and diarrhea. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Prolonged or repeated contact may cause drying, cracking and defatting of the skin.

Environmental precautions: Avoid release to the environment. See ECOLOGICAL INFORMATION, Section 12.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical name</u>	<u>Common name and synonyms</u>	<u>CAS #</u>	<u>Concentration (% by weight)</u>
Glycol ether	Not available	Proprietary	Proprietary

SECTION 4. FIRST-AID MEASURES

Description of first aid measures

Ingestion : IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

Inhalation : If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician.

Skin contact : IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/physician if you feel unwell. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: get medical advice/attention.

Eye contact : 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.



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Most important symptoms and effects, both acute and delayed

- : Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Symptoms may include severe abdominal pain, vomiting, burns and bleeding.
Toxic in contact with skin. May be absorbed through the skin, producing symptoms similar to ingestion or inhalation.
- : Toxic if inhaled. Symptoms may include coughing, choking and wheezing. May cause respiratory impairment and lung damage.
- : Causes skin irritation. Contact may cause redness, swelling and a painful sensation.
- : Causes serious eye irritation. Symptoms may include redness, pain, tearing and conjunctivitis.
- : Prolonged overexposure may cause slight kidney effects, such as increased organ weight. Prolonged or repeated contact may cause drying, cracking and defatting of the skin. Chronic overexposure to 2-butoxyethanol may cause liver, kidney and blood damage, based on animal data.

Indication of any immediate medical attention and special treatment needed

- : Provide general supportive measures and treat symptomatically. Show this safety data sheet to the doctor in attendance.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

- : Dry chemical, foam, carbon dioxide and water fog.

Unsuitable extinguishing media

- : Do not use water stream as it may scatter and spread fire.

Special hazards arising from the substance or mixture / Conditions of flammability

- : Combustible liquid and vapor. Keep away from flames and hot surfaces. Vapours are heavier than air and collect in confined and low-lying areas. Material will float on water and can be re-ignited at the water's surface. Vapors may travel considerable distance to a source of ignition and flash back. After prolonged storage, may release explosive peroxides in the presence of air. Rate of peroxide formation is not known. This product will accumulate static charge by flow, splashing or agitation. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

Flammability classification (OSHA 29 CFR 1910.106)

- : Flammable Liquid - Category 4

Hazardous combustion products

- : None known or reported by the manufacturer. In the event of fire the following can be released: Carbon oxides;irritating fumes and smoke

Special protective equipment and precautions for firefighters

Protective equipment for fire-fighters

- : Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode.

Special fire-fighting procedures

- : Move containers from fire area if safe to do so. Use water spray to keep containers cool. Prevent runoff from fire control or dilution from entering sewers, drains, drinking water supply or any natural waterway. Dike for water control.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures



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: Evacuate personnel to safe areas. Keep all other personnel upwind and away from the spill/release. All persons dealing with clean-up should wear the appropriate protective equipment including self-contained breathing apparatus. Restrict access to area until completion of clean-up. Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Ensure spilled product does not enter drains, sewers, waterways, or confined spaces. If necessary, dike well ahead of the spill to prevent runoff into drains, sewers, or any natural waterway or drinking supply.

Methods and material for containment and cleaning up

: Ventilate the area. Remove all sources of ignition. Prevent further leakage or spillage if safe to do so. Use only non-sparking tools. Bond and ground transfer containers and equipment to avoid static accumulation. For spilled liquids: absorb spill with inert, non-combustible material such as sand, then place into suitable containers. Do not use combustible absorbents, such as sawdust. Pick up and transfer to properly labeled containers. Contaminated absorbent material may pose the same hazards as the spilled product. Contact the proper local authorities.

Special spill response procedures

: If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the National Response Center in the United States (phone: 1-800-424-8802).
 US CERCLA Reportable quantity (RQ): None.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

: Keep away from flames and hot surfaces. - No smoking. Use only outdoors or in a well-ventilated area. Wear protective gloves/clothing and eye/face protection. Avoid breathing mist or spray. Take precautionary measures against static discharges. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Do not ingest. Do not get in eyes, on skin, or on clothing. Use proper bonding and grounding techniques when transferring liquid. Avoid contact with incompatible materials.

Conditions for safe storage : Store in well-ventilated place. Keep cool. Keep tightly closed. Store locked up. Store away from incompatibles and out of direct sunlight. Take measures to prevent the build up of electrostatic charge. After prolonged storage, may release explosive peroxides in the presence of air. Rate of peroxide formation is not known. Direct sunlight or heat may accelerate the release of peroxides. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. No smoking in the area.

Incompatible materials : Strong oxidizing agents, Perchloric acid, Bases

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<u>Chemical Name</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>	
	<u>TWA</u>	<u>STEL</u>	<u>PEL</u>	<u>STEL</u>
	Glycol ether	20 ppm	N/Av	50 ppm (skin)

Exposure controls

Ventilation and engineering measures



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- Respiratory protection** : Use only outdoors or in a well-ventilated area. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Use non-sparking equipment. In case of insufficient ventilation wear suitable respiratory equipment.
- Respiratory protection** : If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable approved respiratory protection. If the TLV is exceeded, a NIOSH/MSHA-approved respirator is advised. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134) or CSA Z94.4-02. Confirmation of which type of respirator is most suitable for the intended application should be obtained from respiratory protection suppliers.
- Skin protection** : Wear protective gloves/clothing. Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact. The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Eye / face protection** : Wear eye/face protection. Chemical splash goggles are recommended. A full face shield may also be necessary.
- Other protective equipment** : Ensure that eyewash stations and safety showers are close to the workstation location. Other equipment may be required depending on workplace standards.
- General hygiene considerations** : Avoid breathing mist or spray. Do not eat, drink, smoke or use cosmetics while working with this product. Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical State** : Liquid
- Colour** : Amber
- Odour** : Solvent odor.
- Odour threshold** : N/Av
- pH** : N/Av
- Melting Point/Freezing point** : -102.64°F (-74.8°C)
- Initial boiling point and boiling range** : >334.4°F (>168°C)
- Flash point** : 67.8°C / 154°F
- Flashpoint (Method)** : Tag closed cup
- Evaporation rate (BuAe = 1)** : Slower than n-butyl acetate
- Flammability** : Combustible
- Lower explosion or flammability limit (% by vol.)** : 1.1%
- Upper explosion or flammability limit (% by vol.)** : 10.6%
- Oxidizing properties** : None known.
- Explosive properties** : Not explosive
- Vapour pressure** : 0.6 mm Hg
- Relative vapour density** : >1
- Relative density / Specific gravity** : 0.89
- Solubility in water** : Soluble
- Other solubility(ies)** : N/Av
- Partition coefficient: n-octanol/water or Coefficient of water/oil distribution** : N/Av
- Auto-ignition temperature** : 460.4°F (238°C)



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Decomposition temperature : N/Av
Viscosity : N/Av
Particle characteristics : N/Av
Volatiles (% by weight) : 100%estimated
Volatile organic Compounds (VOC's)
: 100%

Other physical/chemical comments

: None known or reported by the manufacturer.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not normally reactive.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions

: Hazardous polymerization does not occur. May form explosive peroxides during prolonged exposure to air and heat. May be sensitive to static discharge.

Conditions to avoid

: Keep away from flames and hot surfaces. Keep away from direct sunlight. Do not use in areas without adequate ventilation. Take precautionary measures against static discharge. Avoid contact with incompatible materials.

Incompatible materials

: Strong oxidizing agents Perchloric acid Bases Air Reacts with air to form peroxides. See Section 7 (Handling and Storage) for further details.

Hazardous decomposition products

: May form explosive peroxides. Exposure to light may accelerate peroxide formation. None known, refer to hazardous combustion products in Section 5.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Routes of entry inhalation : YES

Routes of entry skin & eye : YES

Routes of entry Ingestion : YES

Routes of exposure skin absorption

: YES

Potential Health Effects:

Signs and symptoms of short-term (acute) exposure

Sign and symptoms Inhalation

: Toxic if inhaled. Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects. Inhalation of vapors or mists may cause irritation to the nose, throat and upper respiratory tract. Symptoms may include coughing, choking and wheezing.

Sign and symptoms ingestion

: Harmful if swallowed. Ingestion may cause symptoms similar to inhalation. Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects. Ingestion may irritate digestive tract and cause nausea, vomiting and diarrhea.



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Sign and symptoms skin : Toxic in contact with skin. May be absorbed through the skin, producing symptoms similar to ingestion or inhalation.
 Causes skin irritation. Symptoms include: Dryness, itching, cracking, burning, redness and swelling.

Sign and symptoms eyes : Causes serious eye irritation. Symptoms may include redness, pain, tearing and conjunctivitis.

Potential Chronic Health Effects

: Prolonged or repeated contact may cause drying, cracking and defatting of the skin. Chronic overexposure to 2-butoxyethanol may cause liver, kidney and blood damage. Prolonged overexposure may cause slight kidney effects, such as increased organ weight.

Mutagenicity : Not expected to be mutagenic in humans.

Carcinogenicity : Not expected to have carcinogenic effects.

Reproductive effects & Teratogenicity

: This product is not expected to cause reproductive or developmental effects.

Sensitization to material : Not expected to be a skin or respiratory sensitizer.

Specific target organ effects : The substance or mixture is not classified as specific target organ toxicant, single exposure.
 The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Medical conditions aggravated by overexposure

: Pre-existing skin, eye, respiratory and central nervous system disorders.

Synergistic materials : Not available.

Toxicological data : There is no available data for the product itself, only for the ingredients. See below for individual ingredient acute toxicity data.

<u>Chemical name</u>	<u>LC₅₀(4hr)</u> <u>inh, rat</u>	<u>LD₅₀</u>	
		<u>(Oral, rat)</u>	<u>(Rabbit, dermal)</u>
Glycol ether	450 ppm (2.175 mg/L)	530 mg/kg	400 - 500 mg/kg

Other important toxicological hazards

: None known or reported by the manufacturer.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity : No data is available on the product itself. See the following tables for individual ingredient ecotoxicity data.

Ecotoxicity data:

<u>Ingredients</u>	<u>CAS #</u>	<u>Toxicity to Fish</u>		
		<u>LC50 / 96h</u>	<u>NOEC / 21 day</u>	<u>M Factor</u>
Glycol ether	Proprietary	1490mg/L (Lepomis macrochirus)	>100mg/L (Zebra fish)	none



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<u>Ingredients</u>	CAS #	<u>Toxicity to Daphnia</u>		
		<u>EC50 / 48h</u>	<u>NOEC / 21 day</u>	<u>M Factor</u>
Glycol Ether	Proprietary	835 mg/L (Daphnia magna)	100mg/L (Daphnia magna)	none

<u>Ingredients</u>	CAS #	<u>Toxicity to Algae</u>		
		<u>EC50 / 96h or 72h</u>	<u>NOEC / 96h or 72h</u>	<u>M Factor</u>
Glycol Ether	Proprietary	911mg/L/72hr (Green algae)	286mg/L (Green algae)	none

Persistence and degradability

: The following ingredients are considered to be readily biodegradable: Ethylene glycol monobutyl ether

Bioaccumulation potential

: No data is available on the product itself. See the following data for ingredient information.

<u>Components</u>	<u>Partition coefficient n-octanol/water (log Kow)</u>	<u>Bioconcentration factor (BCF)</u>
Glycol Ether	0.81 at 25 °C	0.97

Mobility in soil

: No data is available on the product itself.

Other Adverse Environmental effects

: The ecological characteristics of this product have not been fully investigated. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.

SECTION 13. DISPOSAL CONSIDERATIONS

Handling for Disposal

: Handle in accordance with good industrial hygiene and safety practice. Refer to protective measures listed in sections 7 and 8.

Methods of Disposal

: Dispose in accordance with all applicable regulations.

RCRA

: If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.




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SECTION 14. TRANSPORT INFORMATION

Regulatory Information	UN Number	UN proper shipping name	Transport hazard class(es)	Packing Group	Label
49CFR/DOT	NA1993	Combustible liquid, n.o.s. (Ethylene glycol monobutyl ether)	Combustible.	III	
49CFR/DOT Additional information	Not regulated for road or rail shipment if packaged in non-bulk containers (450 L / 119 Gallons or less each). The 'label' appearing here is the placard to be used for bulk shipments.				
TDG	None	Not regulated.	Not regulated	none	none
TDG Additional information	None.				
ICAO/IATA	None.	Not regulated.	not regulated	none	none
ICAO/IATA Additional information	None.				
IMDG	None.	Not regulated.	not regulated	none	none
IMDG Additional information	None.				

Special precautions for user : Keep away from heat and open flames. - No smoking.

Environmental hazards : This product does not meet the criteria for an environmentally hazardous mixture, according to the IMDG Code. See ECOLOGICAL INFORMATION, Section 12.

SECTION 15 - REGULATORY INFORMATION

US Federal Information:

Components listed below are present on the following U.S. Federal chemical lists:

Ingredients	CAS #	TSCA Inventory	CERCLA Reportable Quantity(RQ) (40 CFR 117.302):	SARA TITLE III: Sec. 302, Extremely Hazardous Substance, 40 CFR 355:	SARA TITLE III: Sec. 313, 40 CFR 372, Specific Toxic Chemical	
					Toxic Chemical	de Minimis Concentration
Glycol ether	Proprietary	Yes	N/Ap	N/Ap	No	No

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes: Flammable; Acute toxicity; Skin irritation ;Eye irritation.



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US State Right to Know Laws:

The following chemicals are specifically listed by individual States:

<u>Ingredients</u>	CAS #	California Proposition 65		State "Right to Know" Lists					
		Listed	Type of Toxicity	CA	MA	MN	NJ	PA	RI
Glycol ether	Proprietary	No	Not listed	Yes	Yes	Yes	Yes	Yes	Yes

Canadian Information:

All ingredients are present on the DSL. Refer to Section 2 for a WHMIS Classification for this product.

International Information:

Components listed below are present on the following International Inventory list:

<u>Ingredients</u>	CAS #	European EINECs	Australia AICS	Philippines PICCS	Japan ENCS	Korea KECI/KECL	China IECSC	NewZealand IOC
Glycol Ether	Proprietary	Proprietary	Present	Present	Present	Present	Present	Present

SECTION 16. OTHER INFORMATION

Legend

- : ACGIH: American Conference of Governmental Industrial Hygienists
- CAS: Chemical Abstract Services
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
- CFR: Code of Federal Regulations
- CNS: Central Nervous System
- CSA: Canadian Standards Association
- DOT: Department of Transportation
- EC50: Effective Concentration 50%
- ENCS: Existing and New Chemical Substances
- EPA: Environmental Protection Agency
- IARC: International Agency for Research on Cancer
- IMDG: International Maritime Dangerous Goods
- KECI: Korean Existing Chemicals Inventory
- KECL: Korean Existing Chemicals List
- LC: Lethal Concentration
- LD: Lethal Dose
- N/Ap: Not Applicable
- N/Av: Not Available
- NIOSH: National Institute of Occupational Safety and Health
- NOEC: No observable effect concentration
- NTP: National Toxicology Program
- OECD: Organisation for Economic Co-operation and Development
- OSHA: Occupational Safety and Health Administration
- PEL: Permissible exposure limit
- PICCS: Philippine Inventory of Chemicals and Chemical Substances
- SARA: Superfund Amendments and Reauthorization Act



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STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TSCA: Toxic Substance Control Act
TWA: Time Weighted Average

Preparation Date

Reviewed Date SDS : 2024

DISCLAIMER

The information in the Safety Data Sheet is offered for your consideration and guidance when exposed to this product. FPPF Chemical Company, Inc expressly disclaim all expressed or implied warranties and assume no responsibilities for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any-other process. This Safety Data Sheet may not be changed, or altered in any way without the expressed knowledge and permission of FPPF Chemical Company, Inc.

END OF DOCUMENT