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SECTION 1. IDENTIFICATION

Product identifier used on the label
: **Batt 1000 Battery Cleaner**

Other means of identification : F01420

Recommended use of the chemical and restrictions on use
: Battery cleaner
Recommended restrictions: None Known.

Chemical family : Mixture

Name, address, and telephone number of the manufacturer:

FPPF Chemical Company, Inc.
117 West Tupper Street
Buffalo, NY, USA
14201
Manufacturer's Telephone # : 1-800-735-3773

Name, address, and telephone number of the supplier:

Refer to manufacturer

24 Hr. Emergency Tel # : Chemtrec 1-800-424-9300 (Within Continental U.S.); Chemtrec 703-527-3887 (Outside U.S.).

SECTION 2. HAZARDS IDENTIFICATION

Classification of the chemical

Aerosol of clear amber liquid. Mild odor.

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).

Hazard classification :
Flammable Aerosol - Category 1
Gases under pressure
Specific target organ ooxicity, single exposure - Category 3 (narcotic effects)

Label elements

Hazard pictogram(s)

Signal Word

DANGER!

Hazard statement(s)

Extremely flammable aerosol
Contains gas under pressure; may explode if heated.
May cause drowsiness or dizziness.

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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.
Avoid breathing mist or vapor.
Use only outdoors or in a well-ventilated area.

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

Store in a well-ventilated place. Keep container tightly closed.Store locked up.
Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

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

Other hazards

Other hazards which do not result in classification: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical name	Common name and synonyms	CAS #	Concentration (% by weight)
Liquefied petroleum gases	Propane-Isobutane mixture L.P.G.	68476-86-8	**10.0 - 30.0**
Triethanolamine	N,N,N-Triethanolamine	102-71-6	**5.0 - 10.0**

The exact concentrations of the above listed chemicals are being withheld as a trade secret.

SECTION 4. FIRST-AID MEASURES

Description of first aid measures

Ingestion : IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep victim's head lowered (forward) to reduce the risk of aspiration.

Inhalation : IF INHALED: Remove person to fresh air and keep comfortable for breathing. If breathing is difficult, give oxygen by qualified medical personnel only. If breathing has stopped, give artificial respiration. Get medical attention if symptoms persist.

Skin contact : IF ON SKIN: Wash with plenty of soap and water. 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. Flush eyes with water for at least 15 minutes. If eye irritation persists: get medical advice/attention.

Most important symptoms and effects, both acute and delayed

: Direct skin contact may cause slight or mild, transient irritation. Direct eye contact may cause slight or mild, transient irritation. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Indication of any immediate medical attention and special treatment needed

: Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

: Use water fog or fine spray, foams, carbon dioxide or dry chemical.

Unsuitable extinguishing media

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

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

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: Extremely flammable aerosol May be ignited by open flames and sparks. Contains gas under pressure; may explode if heated. Vapours may be heavier than air and may collect in confined and low-lying areas. Material will float on water and can be re-ignited at the water's surface. This product is contained under pressure, and could explode when exposed to heat and flame.

Flammability classification (OSHA 29 CFR 1910.106)

: Flammable aerosol -Category 1

Hazardous combustion products

: Carbon monoxide, carbon dioxide, toxic vapours, gases or particulates.

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.

Special fire-fighting procedures

: Fight fires from a safe distance. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

: Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. Individuals involved in the cleanup must wear appropriate personal protective equipment. For personal protection see section 8.

Environmental precautions : Ensure spilled product does not enter drains, sewers, waterways, or confined spaces. For large spills, dike the area to prevent spreading.

Methods and material for containment and cleaning up

: Ventilate area of release. Stop spill or leak at source if safely possible. Dike for water control. Use only non-sparking tools and equipment in the clean-up process. Contain and absorb spilled liquid with inert, non-combustible absorbent material (e.g. sand, vermiculite), then place material into open, unsealed containers. For waste disposal, see Section 13 of the SDS.

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): See section 15.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

: Wear suitable protective equipment during handling. Do not ingest or swallow. Avoid breathing vapours. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.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.Keep away from incompatibles.Follow labeled warnings even after container is emptied.

Conditions for safe storage : Store in a cool, dry, well-ventilated area. Store locked up. 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. Have appropriate fire extinguishers and spill clean-up equipment in or near storage area. Protect from sunlight and do not expose to temperatures exceeding 50 °C/122 °F.

Incompatible materials : None reported by the manufacturer.

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SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:

Chemical Name	ACGIH TLV		OSHA PEL	
	TWA	STEL	PEL	STEL
Liquefied petroleum gases	1000 ppm (as 'Butane, all isomers')	N/Av	1000 ppm (1800 mg/m³) (as Propane)	N/Av
Triethanolamine	5 mg/m³	N/Av	N/Av	N/Av

Exposure controls

Ventilation and engineering measures
: Ensure adequate ventilation, especially in confined areas. Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits. Use explosion-proof electrical and ventilating equipment.

Respiratory protection : Respiratory protection is required if the concentrations exceed the TLV. NIOSH-approved respirators are recommended. Advice should be sought from respiratory protection specialists. 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.

Skin protection : Wear protective gloves.Advice should be sought from glove suppliers.

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

Other protective equipment : An eyewash station and safety shower should be made available in the immediate working area. Depending on conditions of use, an impervious apron should be worn. Other equipment may be required depending on workplace standards.

General hygiene considerations
: Avoid breathing vapour or mist. Avoid contact with skin, eyes and clothing. Do not ingest. Do not eat, drink or smoke when using this product. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove soiled clothing and wash it thoroughly before reuse.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Clear amber liquid. aerosol

Odour : Mild odor.

Odour threshold : Not available.

pH : Not available.

Melting Point/Freezing point : Not available.

Initial boiling point and boiling range
: Not available

Flash point : -91°C (-132°F)

Flashpoint (Method) : Closed cup

Evaporation rate (BuAe = 1) : Not available.

Flammability (solid, gas) : Not applicable.

Lower flammable limit (% by vol.)
: not determined

Upper flammable limit (% by vol.)
: not determined

Oxidizing properties : None.

Explosive properties : Not explosive

Vapour pressure : Not available.

Vapour density : Not available.

Relative density / Specific gravity
: 0.986

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Solubility in water : Insoluble.
Other solubility(ies) : Not available.
Partition coefficient: n-octanol/water or Coefficient of water/oil distribution
: Not available.
Auto-ignition temperature : Not available.
Decomposition temperature : Not applicable.
Viscosity : Not determined.
Volatiles (% by weight) : 14.08 %
Volatile organic Compounds (VOC's)
: Not applicable.
Absolute pressure of container
: N/Ap
Flame projection length : N/Ap
Other physical/chemical comments
: None known or reported by the manufacturer.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not expected to be reactive.
Chemical stability : Stable under the recommended storage and handling conditions prescribed.
Possibility of hazardous reactions
: Hazardous polymerization does not occur.
Conditions to avoid : Direct sources of heat. Do not use in areas without adequate ventilation. Avoid contact with incompatible materials. Protect from sunlight and do not expose to temperatures exceeding 50 °C/122 °F.
Incompatible materials : Incompatible materials (see Section 7).
Hazardous decomposition products
: See Section 5 (Fire Fighting Measures).

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
: NO

Potential Health Effects:

Signs and symptoms of short-term (acute) exposure

Sign and symptoms Inhalation
: May cause irritation of the nose, throat, mucous membranes, and respiratory tract. Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects.
Sign and symptoms ingestion
: May cause irritation of mouth, throat, and stomach.
Sign and symptoms skin : Direct skin contact may cause slight or mild, transient irritation.
Sign and symptoms eyes : May cause severe eye irritation. Symptoms may include redness, pain, tearing and conjunctivitis.
Potential Chronic Health Effects
: Prolonged or repeated skin contact may cause drying and irritation. Prolonged overexposure may cause liver and kidney effects.
Mutagenicity : Not expected to be mutagenic in humans.
Carcinogenicity : No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

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Reproductive effects & Teratogenicity

: Not expected to have other reproductive effects.

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

Specific target organ effects :

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:

Specific target organ toxicity, single exposure - Category 3 (respiratory)

May cause respiratory irritation.

Not classified as specific target organ toxicity-repeated exposure.

Medical conditions aggravated by overexposure

: Pre-existing skin, eye and respiratory disorders.

Synergistic materials : None known or reported by the manufacturer.

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

Chemical name	LC_{50}(4hr) inh, rat	LD_{50} (Oral, rat)	LD_{50} (Rabbit, dermal)
Liquefied petroleum gases	276 000 ppm (Butane)	N/Ap (gas)	N/Ap (gas)
Triethanolamine	N/Av	6110 mg/kg	> 2000 mg/kg (No mortality)

Other important toxicological hazards

: None known or reported by the manufacturer.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity : Harmful to aquatic life with long lasting effects.

Ecotoxicity data:

Ingredients	CAS No	Toxicity to Fish		
		LC50 / 96h	NOEC / 21 day	M Factor
Liquefied petroleum gases	68476-86-8	N/Ap	N/Ap	N/Ap
Triethanolamine	102-71-6	11 800 mg/L (Fathead minnow)	N/Av	None.

Ingredients	CAS No	Toxicity to Daphnia		
		EC50 / 48h	NOEC / 21 day	M Factor
Liquefied petroleum gases	68476-86-8	N/Ap	N/Ap	N/Ap
Triethanolamine	102-71-6	609.88 mg/L [Ceriodaphnia (water flea)]	16 mg/L	None.

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Ingredients	CAS No	Toxicity to Algae		
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor
Liquefied petroleum gases	68476-86-8	N/Ap	N/Ap	N/Ap
Triethanolamine	102-71-6	216 mg/L/72hr (Green algae)	N/Av	None.

Persistence and degradability
: Expected to be readily biodegradable.

Bioaccumulation potential : Not expected to bioaccumulate.

Components	Partition coefficient n-octanol/water (log Kow)	Bioconcentration factor (BCF)
Liquefied petroleum gases (CAS 68476-86-8)	2.89 (Butane)	33 (Butane)
Triethanolamine (CAS 102-71-6)	- 1.59	< 3.9 (common carp)

Mobility in soil : No data is available on the product itself.

Other Adverse Environmental effects
: No data is available on the product itself.
.

SECTION 13. DISPOSAL CONSIDERATIONS

Handling for Disposal : See Section 7 (Handling and Storage) for further details. Empty containers retain residue (liquid and/or vapour) and can be dangerous. Do not cut, weld, drill or grind on or near this container.

Methods of Disposal : Dispose in accordance with all applicable federal, state, provincial and local 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.

SECTION 14. TRANSPORT INFORMATION

Regulatory Information	UN Number	UN proper shipping name	Transport hazard class(es)	Packing Group	Label
TDG	UN1950	AEROSOLS, flammable	2.1	none	
TDG Additional information	May be shipped as LIMITED QUANTITY when transported in containers no larger than 1.0 Litre, in packages not exceeding 30 kg gross mass. Under the TDG, refer to Section 1.17 for additional exemption requirements, if shipping under this exemption.				
49CFR/DOT	None.	Limited Quantity	New LTD QTY	none	
49CFR/DOT Additional information	May be shipped as LIMITED QUANTITY when transported in containers no larger than 1.0 Litre, in packages not exceeding 30 kg gross mass.				

Special precautions for user : Keep away from heat, sparks and open flame - 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.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
: Not available.

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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 minimus Concentration
Liquefied petroleum gases	68476-86-8	Yes	None.	None.	No	N/Ap
Triethanolamine	102-71-6	Yes	N/Ap	N/Ap	No	N/Ap

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes: Physical hazards (Flammable; Gas Under Pressure) Health hazards (Specific target organ toxicity, single exposure). Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

US State Right to Know Laws:

The following chemicals are specifically listed by individual States:

Ingredients	CAS #	California Proposition 65		State "Right to Know" Lists					
		Listed	Type of Toxicity	CA	MA	MN	NJ	PA	RI
Liquefied petroleum gases	68476-86-8	No	N/Ap	No	No	No	No	No	No
Triethanolamine	102-71-6	No	N/Ap	No	Yes	Yes	No	Yes	Yes

Canadian Information:

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

International Information:

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

Ingredients	CAS #	European EINECs	Australia AICS	Philippines PICCS	Japan ENCS	Korea KECI/KECL	China IECSC	NewZealand IOC
Liquefied petroleum gases	68476-86-8	270-705-8	Present	Present	Not listed	KE-28192	Present	May be used as a component in a product covered by a group standard, but is not approved for use as a chemical in its own right.
Triethanolamine	102-71-6	203-049-8	Present	Present	(2)-308	KE-25940	Present	HSR002785

SECTION 16. OTHER INFORMATION

Legend : ACGIH: American Conference of Governmental Industrial Hygienists
CA: California
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act

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of 1980
CFR: Code of Federal Regulations
CNS: Central Nervous System
CSA: Canadian Standards Association
DOT: Department of Transportation
EPA: Environmental Protection Agency
HMIS: Hazardous Materials Identification System
HSDB: Hazardous Substances Data Bank
IARC: International Agency for Research on Cancer
Inh: Inhalation
IUCLID: International Uniform Chemical Information Database
LC: Lethal Concentration
LD: Lethal Dose
MA: Massachusetts
MN: Minnesota
N/Ap: Not Applicable
N/Av: Not Available
NFPA: National Fire Protection Association
NIOSH: National Institute of Occupational Safety and Health
NJ: New Jersey
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PA: Pennsylvania
PEL: Permissible exposure limit
RCRA: Resource Conservation and Recovery Act
RI: Rhode Island
RTECS: Registry of Toxic Effects of Chemical Substances
SARA: Superfund Amendments and Reauthorization Act
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Identification System

References : 1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices for 2018.
2. International Agency for Research on Cancer Monographs, searched 2018.
3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2018 (Chempendium, HSDB and RTECs).
4. Material Safety Data Sheets from manufacturer.
5. US EPA Title III List of Lists - March 2015 version.
6. California Proposition 65 List - November 23, 2018 version.
7. OECD - The Global Portal to Information on Chemical Substances - eChemPortal, 2018.

Preparation Date (mm/dd/yyyy)
: 03/07/2019

Other special considerations for handling
: Provide adequate information, instruction and training for operators.

Prepared for: FPPF Chemical Company, Inc. 117 West Tupper Street Buffalo, NY, USA 14201 Telephone: 1-800-735-3773 Please direct all enquiries to FPPF Chemical Company	
Prepared by: ICC The Compliance Center Inc. Telephone: (888) 442-9628 (U.S.): (888) 977-4834 (Canada) http://www.thecompliancecenter.com	

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