SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

Product identifier used on the label

: **Marine Diesel Fuel Treatment**

Product Code(s) : US Product Codes: 00165, 90165, 00166P, 00167
Canadian Product Codes: None known.

Recommended use of the chemical and restrictions on use

: Fuel system treatment. No restrictions on use 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

Clear to slightly hazy amber liquid. Solvent 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).

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
Eye damage/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.

SAFETY DATA SHEET

Precautionary statement(s)

Keep away from flames and hot surfaces. - No smoking.
Use only outdoors or in a well-ventilated area.
Avoid breathing mist or vapor.
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.

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.
In case of fire: Use water fog, dry chemical, CO2 or 'alcohol' foam to extinguish.

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

No OSHA defined hazard classes.
Other hazards which do not result in classification: May be sensitive to static discharge. Burning produces obnoxious and toxic fumes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
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

Chemical name	Common name and synonyms	CAS #	Concentration (% by weight)
Ethylene glycol monobutyl ether (EGMBE)	Ethylene glycol monobutyl ether butyl cellosolve Glycol Ether EB EGBE	111-76-2	**65.0 - 85.0**
2-Ethylhexyl nitrate	Not available.	27247-96-7	**15.0 - 40.0**
oleic acid	Oleinic acid	112-80-1	**1.0 - 5.0**
2-Ethylhexanol	2-ethylhexan-1-ol 2-Ethylhexyl alcohol 2EH	104-76-7	**0.1 - 1.0**

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: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Do not induce vomiting. Never give anything by mouth if victim is unconscious.

Inhalation : If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only.

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. Flush eyes with water for at least 15 minutes. If eye irritation persists: get medical advice/attention.

SAFETY DATA SHEET

Most important symptoms and effects, both acute and delayed

:

Harmful if swallowed. Symptoms may include severe abdominal pain, vomiting, burns and bleeding. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
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. Symptoms may include redness, itching and swelling.
Causes serious eye irritation. Symptoms may include redness, pain, tearing and conjunctivitis.

Prolonged overexposure may cause liver and kidney 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, based on animal data.

Indication of any immediate medical attention and special treatment needed

: Treat symptomatically. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. 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 heat, sparks and open flames. Can form explosive mixtures with air. Use only outdoors or in a well-ventilated area.
May be sensitive to static discharge. After prolonged storage, may release explosive peroxides in the presence of air. Rate of peroxide formation is not known. Vapors may travel considerable distance to a source of ignition and flash back. Vapours are heavier than air and collect in confined and low-lying areas. Product may float, and be re-ignited at the water's surface. 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

: Carbon oxides and other 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

: 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.

SAFETY DATA SHEET

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. Dike for water control. For spilled liquids: absorb spill with inert, non-combustible material such as sand, then place into suitable containers. Use only non-sparking tools. Do not use combustible absorbents, such as sawdust. Bond and ground transfer containers and equipment to avoid static accumulation. 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

: In case of a transportation accident, in the United States contact CHEMTREC at 1-800-424-9300 or International at 1-703-527-3887. 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): Catechol (100 lbs / 45.4 kg)

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from flames and hot surfaces. Use only outdoors or in a well-ventilated area. Wear protective gloves/clothing and eye/face protection. Avoid breathing mist or vapours. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Do not ingest. Bond and ground transfer containers and equipment. Avoid contact with eyes, skin and clothing. 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. Direct sunlight or heat may accelerate the release of peroxides. Rate of peroxide formation is not known. 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, Acids and bases

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:

Chemical Name	ACGIH TLV		OSHA PEL	
	TWA	STEL	PEL	STEL
Ethylene glycol monobutyl ether (EGMBE)	20 ppm	N/Av	50 ppm (240 mg/m³) (skin)	N/Av
2-Ethylhexyl nitrate	N/Av	N/Av	N/Av	N/Av
oleic acid	N/Av	N/Av	N/Av	N/Av
2-Ethylhexanol	N/Av	N/Av	N/Av	N/Av

Exposure controls

Ventilation and engineering measures

: 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.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.

SAFETY DATA SHEET

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 : Eye wash facilities and emergency shower must be available when handling this product. Other equipment may be required depending on workplace standards.

General hygiene considerations

: Avoid breathing mist or spray. Do not eat, drink or smoke when using 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

Appearance : Clear to slightly hazy amber liquid.

Odour : Solvent odor.

Odour threshold : N/Av

pH : N/Av

Melting/Freezing point : N/Av

Initial boiling point and boiling range

: >355°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 (solid, gas) : N/Ap

Lower flammable limit (% by vol.)

: 1.1%

Upper flammable limit (% by vol.)

: 10.6%

Oxidizing properties : None known.

Explosive properties : Not explosive

Vapour pressure : 0.6 mm Hg (approximately)

Vapour density : >1

Relative density / Specific gravity

: 0.89

Solubility in water : Partially soluble.

Other solubility(ies) : N/Av

Partition coefficient: n-octanol/water or Coefficient of water/oil distribution

: N/Av

Auto-ignition temperature : N/Av

Decomposition temperature : N/Av

Viscosity : N/Av

Volatiles (% by weight) : > 95 %(approximately)

Volatile organic Compounds (VOC's)

: N/Av

Absolute pressure of container

: N/Ap

Flame projection length : N/Av

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.

SAFETY DATA SHEET

Possibility of hazardous reactions
: Hazardous polymerization does not occur. May form explosive peroxides during prolonged exposure to air and heat. Rate of peroxide formation is not known. 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, Acids and bases

Hazardous decomposition products
: None reported. Refer also to hazardous combustion products, 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 vapours 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 can cause gastrointestinal irritation, nausea, and diarrhea.

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 may include redness, itching 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 liver and kidney effects, such as increased organ weights. Prolonged or repeated contact may cause drying, cracking and defatting of the skin.

Mutagenicity : Not expected to be mutagenic in humans.

Carcinogenicity : No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

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.

SAFETY DATA SHEET

Toxicological data : The calculated ATE values for this mixture are:
ATE oral = 647 mg/kg
ATE dermal = 484 mg/kg
ATE inhalation (vapours) = 2.6 mg/L/4H
See below for individual ingredient acute toxicity data.

Chemical name	LC_{50}(4hr) inh, rat	LD_{50} (Oral, rat)	LD_{50} (Rabbit, dermal)
Ethylene glycol monobutyl ether (EGMBE)	450 ppm (2.175 mg/L) (vapour)	530 mg/kg	400 - 500 mg/kg
2-Ethylhexyl nitrate	>4.6mg/L	960mg/kg	N/Av
oleic acid	N/Av	>19200 mg/kg	N/Av
2-Ethylhexanol	≥ 1.2, < 5.3 mg/L (aerosol)	2052 mg/kg	> 3000 mg/kg (No mortality)

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:

Ingredients	CAS No	Toxicity to Fish		
		LC50 / 96h	NOEC / 21 day	M Factor
Ethylene glycol monobutyl ether (EGMBE)	111-76-2	1490 mg/L (Bluegill sunfish)	> 100 mg/L (Zebra fish)	None.
2-Ethylhexyl nitrate	27247-96-7	2mg/L (Zebra fish)	N/Av	None.
oleic acid	112-80-1	96 Hr LC50 Pimephales promelas: 205 mg/L [static]	N/Av	N/Av
2-Ethylhexanol	104-76-7	17.1 mg/L (Golden orfe)	N/Av	None.

Ingredients	CAS No	Toxicity to Daphnia		
		EC50 / 48h	NOEC / 21 day	M Factor
Ethylene glycol monobutyl ether (EGMBE)	111-76-2	835 mg/L (Daphnia magna)	100 mg/L	None.
2-Ethylhexyl nitrate	27247-96-7	>12.6mg/L	N/Av	None.
oleic acid	112-80-1	N/Av	N/Av	N/Av
2-Ethylhexanol	104-76-7	39 mg/L (Daphnia magna)	N/Av	None.

SAFETY DATA SHEET

Ingredients	CAS No	Toxicity to Algae		
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor
Ethylene glycol monobutyl ether (EGMBE)	111-76-2	911 mg/L/72hr (Green algae)	286 mg/L/72hr	None.
2-Ethylhexyl nitrate	27247-96-7	<0.8mg/L	1.42mg/L	None.
oleic acid	112-80-1	N/Av	N/Av	N/Av
2-Ethylhexanol	104-76-7	11.5 mg/L/72hr (Green algae)	N/Av	None.

Persistence and degradability
: No data is available on the product itself. The following ingredients are considered to be readily biodegradable: 2-butoxyethanol, Catechol

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

Components	Partition coefficient n-octanol/water (log Kow)	Bioconcentration factor (BCF)
Ethylene glycol monobutyl ether (EGMBE) (CAS 111-76-2)	0.8	0.97
2-Ethylhexyl nitrate (CAS 27247-96-7)	5.24	1332
2-Ethylhexanol (CAS 104-76-7)	2.9	30

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.

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	
TDG Additional information	None.				

SAFETY DATA SHEET

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.

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
Ethylene glycol monobutyl ether (EGMBE)	111-76-2	Yes	None.	None.	No	N/Ap
2-Ethylhexyl nitrate	27247-96-7	Yes	None.	N/Ap	No	N/Ap
oleic acid	112-80-1	Yes	N/Ap	N/Av	No	N/Ap
2-Ethylhexanol	104-76-7	Yes	None.	None.	No	N/Ap

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes: Physical hazards (Flammable) Health hazards (Acute toxicity ; Skin irritation; Eye irritation).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
Ethylene glycol monobutyl ether (EGMBE)	111-76-2	No	N/Ap	Yes	Yes	Yes	Yes	Yes	Yes
2-Ethylhexyl nitrate	27247-96-7	No	N/Ap	No	No	NS	No	Yes	NS
oleic acid	112-80-1	No	N/Ap	No	No	No	No	Yes	Yes
2-Ethylhexanol	104-76-7	No	N/Ap	No	Yes	No	No	Yes	No

Canadian Information:

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (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:

SAFETY DATA SHEET

Ingredients	CAS #	European EINECs	Australia AICS	Philippines PICCS	Japan ENCS	Korea KECI/KECL	China IECSC	NewZealand IOC
Ethylene glycol monobutyl ether (EGMBE)	111-76-2	203-905-0	Present	Present	(7)-97; (2)-407	KE-04134	Present	HSR001154
2-Ethylhexyl nitrate	27247-96-7	248-363-6	N/Av	Listed	N/Av	N/Av	Listed	Listed
oleic acid	112-80-1	204-007-1	Present	Present	(2)-975; (2)-609	KE-26450	Present	HSR003153
2-Ethylhexanol	104-76-7	203-234-3	Present	Present	(2)-217	KE-13766	Present	HSR001386

SECTION 16. OTHER INFORMATION

Legend : ACGIH: American Conference of Governmental Industrial Hygienists
ATE: Acute Toxicity Estimate
CA: California
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%
EINECS: European Inventory of Existing Commercial chemical Substances
ENCS: Existing and New Chemical Substances
EPA: Environmental Protection Agency
HMIS: Hazardous Materials Identification System
HSDB: Hazardous Substances Data Bank
IARC: International Agency for Research on Cancer
IECSC: Inventory of Existing Chemical Substances
IMDG: International Maritime Dangerous Goods
Inh: Inhalation
KECI: Korean Existing Chemicals Inventory
KECL: Korean Existing Chemicals List
LC: Lethal Concentration
LD: Lethal Dose
MA: Massachusetts
MN: Minnesota
MSHA: Mine Safety and Health Administration
N/Ap: Not Applicable
N/Av: Not Available
NFPA: National Fire Protection Association
NIOSH: National Institute of Occupational Safety and Health
NJ: New Jersey
NOEC: No observable effect concentration
NTP: National Toxicology Program
OECD: Organisation for Economic Co-operation and Development
OSHA: Occupational Safety and Health Administration
PA: Pennsylvania
PEL: Permissible exposure limit
PICCS: Philippine Inventory of Chemicals and Chemical Substances
RCRA: Resource Conservation and Recovery Act
RI: Rhode Island
RTECS: Registry of Toxic Effects of Chemical Substances
SARA: Superfund Amendments and Reauthorization Act
SDS: Safety Data Sheet
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TPQ: Threshold Planning Quantity
TSCA: Toxic Substance Control Act
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Identification System

SAFETY DATA SHEET

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) : 08/03/2015

Reviewed Date SDS (dd/mm/yyyy) : 14/03/2019

Revision No. : 2

Revision Information : (M)SDS sections updated :1. IDENTIFICATION 2. HAZARDS IDENTIFICATION 3. COMPOSITION/INFORMATION ON INGREDIENTS 11. TOXICOLOGICAL INFORMATION 15. REGULATORY INFORMATION 16. Other information

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	icc ComplianceCenter

DISCLAIMER

This Safety Data Sheet was prepared by ICC The Compliance Center Inc using information provided by / obtained from FPPF Chemical Company, Inc and CCOHS' Web Information Service. The information in the Safety Data Sheet is offered for your consideration and guidance when exposed to this product. ICC The Compliance Center Inc and 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 ICC The Compliance Center Inc and FPPF Chemical Company, Inc.

END OF DOCUMENT