SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

Product identifier used on the label

: Marine Diesel Fuel Treament

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 Name, address, and telephone number of

the manufacturer: the supplier:

FPPF Chemical Company, Inc. Refer to manufacturer

117 West Tupper Street Buffalo, NY, USA

14201

Manufacturer's Telephone # : 1-800-735-3773

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

Colourless to slightly hazy liquid. Amber liquid. Solvent odour.

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

Specific Target Organ Toxicity, Single Exposure - Category 3 (cns)

Label elements

Hazard pictogram(s)





Signal Word

DANGER!

Hazard statement(s)

Combustible liquid and vapor.

Harmful if swallowed.

Toxic if inhaled.

Toxic in contact with skin.

Causes skin irritation.

Causes serious eye irritation.

May cause drowsiness and dizziness.

Precautionary statement(s)

SAFETY DATA SHEET

Keep away from flames and hot surfaces. - 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 CENTRE or doctor/physician if you feel unwell. Rinse mouth.

IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTRE 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 CENTRE or doctor/physician.

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 cool. Keep container closed. 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 can cause gastrointestinal irritation, nausea, 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
Ethylene glycol monobutyl ether (EGMBE)	2-butoxyethanol EGMBE 2-Butoxy-1-ethanol	111-76-2	70.0 - 80.0
2-Ethylhexyl nitrate	Ethylhexyl nitrate Nitric acid, 2-ethylhexyl ester	27247-96-7	20.0 - 30.0
oleic acid	Oleinic acid 9-Octadecenoic acid Elaic acid	112-80-1	1.0 - 5.0
2-Ethylhexanol	Ethyhexanol 2-ethylhexanol	104-76-7	0.1 - 0.9

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 CENTRE or doctor/physician if you feel unwell.

Rinse mouth. Never give anything by mouth to an unconscious person.

Inhalation : IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a

POISON CENTER or doctor/physician. If breathing is difficult, trained personnel

should give oxygen. If breathing stops, provide artificial respiration.

Skin contact : 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.

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.

Most important symptoms and effects, both acute and delayed

: Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause nausea, vomiting, headache and other central nervous system effects. Symptoms may include severe abdominal pain, nausea and vomiting. Toxic in contact with skin. May be absorbed through the skin, producing symptoms similar to ingestion or inhalation.

Toxic if inhaled. May cause respiratory impairment and lung damage. Symptoms may include coughing, choking and wheezing.

Causes skin irritation. Contact may cause redness, swelling and a painful sensation. Causes serious eye irritation. Symptoms may include redness, pain, tearing and conjunctivitis.

May cause drowsiness and dizziness. Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects.

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

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 build up pressure when exposed to heat and flame.

Flammability classification (OSHA 29 CFR 1910.106)

: Flammable Liquid - Category 4

Hazardous combustion products

Peroxides. Carbon oxides Nitrogen oxides Aldehydes 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.

SAFETY DATA SHEET

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 and equipment in the clean-up process. 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 labelled 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): 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 vapours. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Use proper bonding and grounding techniques when transferring liquid. Do not ingest. 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, Bases Acids Reducing agents

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:							
Chemical Name	ACGI	1 TLV	OSHA PEL				
	<u>TWA</u>	<u>STEL</u>	PEL	<u>STEL</u>			
Ethylene glycol monobutyl ether (EGMBE)	20 ppm	N/Av	50 ppm (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. Use non-sparking equipment. In case of insufficient ventilation wear suitable respiratory equipment.

SAFETY DATA SHEET

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.

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 vapor. 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: Colourless to slightly hazy liquid. Amber liquid.

Odour : Solvent odor.

Initial boiling point and boiling range

: >355°F (>168°C) estimated

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

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

Volatile organic Compounds (VOC's)

: N/Av

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 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 Acids Reducing agents

Hazardous decomposition products

May form explosive peroxides. Exposure to light may accelerate peroxide formation.

Refer to Section 5 for additional 'Hazardous combustion products'.

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. May cause irritation to the nose, throat and upper respiratory tract. 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.

Sign and symptoms skin : To

 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 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.

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.

SAFETY DATA SHEET

Specific target organ effects : Eyes, skin, respiratory system, digestive system, central nervous system.

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 (cns) May

cause drowsiness and dizziness.

Not classified as a specific target organ toxicity-repeated exposure.

Medical conditions aggravated by overexposure

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

Synergistic materials : Not available.

Toxicological data : The calculated ATE values for this mixture are:

ATE oral = 736mg/kg ATE dermal = 471mg/kg

ATE inhalation (vapours) = 3.02mg/L/4H

See below for individual ingredient acute toxicity data.

	LC ₅₀ (4hr)	LD ₅₀		
Chemical name	inh, rat	(Oral, rat)	(Rabbit, dermal)	
Ethylene glycol monobutyl ether (EGMBE)	450 ppm (2.175 mg/L)	530 mg/kg	400 - 500 mg/kg	
2-Ethylhexyl nitrate	> 14mg/L	>10mL/kg (>9600)mg/kg	> 5mL/kg (<4800)mg/kg	
oleic acid	N/Av	>19200 mg/kg	>3000mg/kg guinea pig	
2-Ethylhexanol	≥1.2 - <5.3mg/L (aerosol)	2052mg/kg	No information available.	

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

<u>Ingredients</u>	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)	100mg/L (Daphnia magna)	none		
2-Ethylhexyl nitrate	27247-96-7	> 12.6 mg/L [Daphnia magna (Water flea)]	N/Av	None.		
oleic acid	112-80-1	N/Av	N/Av	None.		
2-Ethylhexanol	104-76-7	39 mg/L (Daphnia magna)	N/Av	None.		

<u>Ingredients</u>	CAS No	Toxicity to Algae				
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor		
Ethylene glycol monobutyl ether (EGMBE)	111-76-2	911mg/L/72hr (Green algae)	286mg/L (Green algae)	none		
2-Ethylhexyl nitrate	27247-96-7	1.57 mg/L/72hr (Green algae)	12.6mg/L/72hr	None.		
oleic acid	112-80-1	N/Av	N/Av	None.		
2-Ethylhexanol	104-76-7	16.6 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: Ethylene glycol monobutyl ether, 2-Ethoxyethanol

Bioaccumulation potential

: No data is available on the product itself.

See the following data for ingredient information.

<u>Components</u>	Partition coefficent n-octanol/ater (log Kow)	Bioconcentration factor (BCF)
Ethylene glycol monobutyl ether (EGMBE) (CAS 111-76-2)	0.81 at 25 °C	
2-Ethylhexyl nitrate (CAS 27247-96-7)	5.24	N/Av
oleic acid (CAS 112-80-1)	7.64	10(calculated)
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 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. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14. TRANSPORTATION 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	COMBUSTIBLE
49CFR/DOT Additional information	This product me	ets the criteria for an environmentally hazardous material acco	ording to the IMDG C	ode.	•
TDG	None	Not regulated.	not regulated	none	\otimes

Special precautions for user

: Keep away from flames and hot surfaces. - No smoking.

Environmental hazards

: This product meets the criteria for an environmentally hazardous material 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:

		TSCA		SARA TITLE III: Sec. 302, Extremely	SARA TITLE III: Sec. 313, 40 CFR 372, Specific Toxic Chemical		
<u>Ingredients</u>	CAS # Inventor	Inventory	Reportable Quantity(RQ) (40 CFR 117.302):	Hazardous Substance, 40 CFR 355:	Toxic Chemical	de minimus Concentration	
Ethylene glycol monobutyl ether (EGMBE)	111-76-2	Yes	N/Ap	N/Ap	No	N/Ap	
2-Ethylhexyl nitrate	27247-96-7	Yes	N/Ap	N/Av	No	N/Ap	
oleic acid	112-80-1	Yes	N/Ap	N/Av	No	N/Ap	
2-Ethylhexanol	104-76-7	Yes	N/Ap	N/Av	No	N/Ap	

SARA TITLE III: Sec. 311 and 312, MSDS Requirements, 40 CFR 370 Hazard Classes: Fire Hazard; Acute Health Hazard. Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds for 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:

<u>Ingredients</u>	CAS#	Cas #		State "Right to Know" Lists					
	CAS#	Listed	Type of Toxicity	CA	MA	MN	NJ	PA	RI
Ethylene glycol monobutyl ether (EGMBE)	111-76-2	No	Not listed	Yes	Yes	Yes	Yes	Yes	Yes
2-Ethylhexyl nitrate	27247-96-7	No	Not listed	No	No	No	No	No	No
oleic acid	112-80-1	No	Not listed	No	No	No	No	Yes	Yes
2-Ethylhexanol	104-76-7	No	Not listed	No	Yes	No	No	Yes	No

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
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	Present	Present	(2)-3598	KE-13803	Present	May be used as a single component chemical under an appropriate group standard
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 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

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

SAFETY DATA SHEET

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 TPQ: Threshold Planning Quantity TSCA: Toxic Substance Control Act TWA: Time Weighted Average

WHMIS: Workplace Hazardous Materials Identification System

References : Canadian Centre for Occupational Health and Safety (CCOHS). CCInfoWeb

databases, 2015 (CHEMINFO, HSDB and RTECS). European Chemicals Agency, Classification Legislation, 2015 Information taken from reference works and the literature.

Material Safety Data Sheet from manufacturer

OECD- The Global Portal to Information on Chemical Substances - eChemPortal,

2015

National occupational exposure limits

Preparation Date (mm/dd/yyyy)

: 08/03/2015

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



DISCLAIMER

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