SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

Product identifier used on the label

: **FPPF Liquid Muscle Diesel Fuel Treatment**

Product Code(s) : Product Code: FP-SL167

Recommended use of the chemical and restrictions on use

: Fuel additive 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

Name, address, and telephone number of the supplier:

Refer to manufacturer

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

Clear 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 3
Specific Target Organ Toxicity, Single Exposure -Category 3 (respiratory)
Specific Target Organ Toxicity, Single Exposure - Category 3 (cns)
Aspiration Toxicity - Category 1

Label elements

Hazard pictogram(s)

Signal Word

DANGER!

Hazard statement(s)

Flammable liquid and vapour
May cause respiratory irritation.
May cause drowsiness and dizziness.
May be fatal if swallowed and enters airways.

Precautionary statement(s)

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Keep away from heat and flame. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing vapors or mists. Use only outdoors or in a well-ventilated area. Wear protective gloves and eye/face protection.

IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE or doctor/physician if you feel unwell. In case of fire: Use alcohol-resistant foam, carbon dioxide or dry chemical to extinguish.

Store in a well-ventilated place. Keep container tightly 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. May be mildly irritating to eyes and skin. 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
Solvent naphtha (petroleum), medium aliphatic	Solvent Naphtha (Petroleum) Medium Aliphatic	64742-88-7	**98**
2-Ethylhexyl nitrate	Nitric Acid, 2-Ethylhexyl Ester	27247-96-7	**0.5 - 1.5**
Solvent naphtha (petroleum), heavy aromatic	Heavy Aromatic Naptha	64742-94-5	**0.5 - 1.5**
oleic acid	Oleinic acid 9-Octadcenoic acid	112-80-1	**0.5 - 1.5**

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: Immediately call a POISON CENTRE or doctor/physician. Do NOT induce vomiting. Material is an aspiration hazard. Guard against aspiration into lungs by having the individual turn on their left side. If vomiting occurs spontaneously, keep victim's head lowered (forward) to reduce the risk of aspiration.

Inhalation : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE or doctor/physician if you feel unwell.

Skin contact : IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Eye contact : In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if irritation develops and persists.

Most important symptoms and effects, both acute and delayed

: May be fatal if swallowed and enters airways. Aspiration hazard - material may cause lung inflammation or damage if it enters lungs through vomiting or swallowing. Symptoms include coughing, shortness of breath and wheezing.
May cause respiratory irritation. Symptoms may include upper respiratory irritation, coughing and breathing difficulties.
May cause drowsiness and dizziness. Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects.
Direct skin contact may cause slight or mild, transient irritation.
Direct eye contact may cause slight or mild, transient irritation.

Indication of any immediate medical attention and special treatment needed

: Immediate medical attention is required. Provide general supportive measures and treat symptomatically. Show this safety data sheet to the doctor in attendance.

SECTION 5. FIRE-FIGHTING MEASURES

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Extinguishing media

Suitable extinguishing media

: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media

: Do not use water jet, as this may spread burning material.

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

: Flammable liquid and vapour . Keep away from heat, sparks, and open flames. This product will accumulate static charge by flow, splashing or agitation. 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 3

Hazardous combustion products

: None reported by the manufacturer. In the event of fire the following can be released: Carbon oxides, nitrogen oxides, aldehydes, 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 cool unopened containers. Avoid spreading burning liquid with water spray used for cooling purposes. Do not allow run-off from fire fighting to enter drains or water courses. Prevent fire extinguishing water from contaminating surface water or the ground water system. Dike for water control.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

: Immediately evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid breathing vapour or mist. Restrict access to area until completion of clean-up. Remove all sources of ignition. All persons dealing with the clean-up should wear the appropriate personal protective equipment. For personal protection see section 8.

Environmental precautions : Avoid release to the environment. Avoid discharge into drains, water courses or onto the ground. For large spills, dike the area to prevent spreading.

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. 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. Bond and ground transfer containers and equipment to avoid static accumulation. Contaminated absorbent material may pose the same hazards as the spilled product. Pick up and transfer to properly labelled containers. 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

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: Keep away from heat, sparks, and open flames. Use only outdoors or in a well-ventilated area. Keep container tightly closed. Bond and ground transfer containers and equipment. Use explosion-proof electrical and ventilating equipment. Use non-sparking tools. Take precautionary measures against static discharge.Wear protective gloves and eye/face protection. Avoid breathing vapour or mist. Do not ingest. Avoid contact with skin, eyes and clothing. Avoid contact with incompatible materials. Encourage good housekeeping and personal hygiene.

Conditions for safe storage : Store in well-ventilated place. Keep cool. Store locked up. Keep container tightly closed. Store away from incompatibles and out of direct sunlight. Take measures to prevent the build up of electrostatic charge. 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 : Acids, strong oxidizing agents, bases. Reducing agents

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:

Chemical Name	ACGIH TLV		OSHA PEL	
	TWA	STEL	PEL	STEL
Solvent naphtha (petroleum), medium aliphatic	100 ppm	N/Av	500 ppm; 2000 mg/m³ (as petroleum distillates, naphtha)	N/Av
2-Ethylhexyl nitrate	N/Av	N/Av	N/Av	N/Av
Solvent naphtha (petroleum), heavy aromatic	N/Av	N/Av	500 ppm (as petroleum distillates, naphtha)	N/Av
oleic acid	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 explosion-proof 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.

Skin protection : Wear protective gloves. 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 : 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 vapour or mist. Avoid contact with skin, eyes and clothing. Do not eat, drink, smoke or use cosmetics while working with this product. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove and wash contaminated clothing before re-use. Do not take contaminated clothing home. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Amber liquid.

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Odour	:	Petroleum odor.
Odour threshold	:	N/Av
pH	:	N/Av
Melting/Freezing point	:	N/Av
Initial boiling point and boiling range	:	284°F (140°C) estimated
Flash point	:	43.9°C / 111°F
Flashpoint (Method)	:	Tag closed cup
Evaporation rate (BuAe = 1)	:	<1
Flammability (solid, gas)	:	N/Ap
Lower flammable limit (% by vol.)	:	0.6% estimated
Upper flammable limit (% by vol.)	:	6.5% estimated
Oxidizing properties	:	None known.
Explosive properties	:	Not explosive
Vapour pressure	:	N/Av
Vapour density	:	>1
Relative density / Specific gravity	:	0.79
Solubility in water	:	practically insoluble
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)	:	N/Av
Volatile organic Compounds (VOC's)	:	N/Av
Absolute pressure of container	:	N/Ap
Flame projection length	:	N/Av
Other physical/chemical comments	:	None 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 be sensitive to static discharge.
Conditions to avoid	:	Keep away from heat, sparks and flame. Take precautionary measures against static discharge. Keep away from direct sunlight. Ensure adequate ventilation, especially in confined areas. Avoid contact with incompatible materials.
Incompatible materials	:	Acids, strong oxidizing agents, bases. Reducing agents
Hazardous decomposition products	:	None reported by the manufacturer. In the event of fire the following can be released: Carbon oxides Nitrogen oxides (NOx) Aldehydes and other irritant gases, which may include toxic constituents.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Routes of entry inhalation	:	YES
Routes of entry skin & eye	:	YES

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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

: Inhalation may cause respiratory irritation and central nervous system depression. Inhalation may provoke the following symptoms: Drowsiness Dizziness Respiratory tract irritation, coughing and wheezing.

Sign and symptoms ingestion

: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Causes symptoms similar to those listed for inhalation.
May be fatal if swallowed and enters airways. Aspiration hazard - material may cause lung inflammation or damage if it enters lungs through vomiting or swallowing. Symptoms include coughing, shortness of breath and wheezing.

Sign and symptoms skin : Direct skin contact may cause slight or mild, transient irritation.

Sign and symptoms eyes : Direct eye contact may cause slight or mild, transient irritation.

Potential Chronic Health Effects

: 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

: Not expected to cause reproductive effects.

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

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 (respiratory) May cause respiratory irritation.
Specific Target Organ Toxicity, Single Exposure - Category 3 (cns) May cause drowsiness and dizziness.

Medical conditions aggravated by overexposure

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

Synergistic materials : None reported by the manufacturer.

Toxicological data : The calculated ATE values for this mixture are:
ATE oral = N/Ap
ATE dermal = 208333mg/kg
ATE inhalation (mists) = 1425mg/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)
Solvent naphtha (petroleum), medium aliphatic	>5500 mg/m³; 21.4 mg/L	>5000 mg/kg	>2000 mg/kg
2-Ethylhexyl nitrate	> 14 mg/L	> 9600 mg/kg	> 4800 mg/kg
Solvent naphtha (petroleum), heavy aromatic	> 17.1 mg/L/4 hours	> 6000 mg/kg	> 3160 mg/kg
oleic acid	N/Av	>19200 mg/kg	>3000mg/kg guinea pig

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Other important toxicological hazards

: None known or reported by the manufacturer.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity : No data is available on the product itself. Should not be released into the environment. See the following tables for the substance's ecotoxicity data.

Ecotoxicity data:

Ingredients	CAS No	Toxicity to Fish		
		LC50 / 96h	NOEC / 21 day	M Factor
Solvent naphtha (petroleum), medium aliphatic	64742-88-7	2 - 5 mg/L (Rainbow trout)	0.098 mg/L/28-day QSAR NOEL	None.
2-Ethylhexyl nitrate	27247-96-7	2 mg/L (Zebra fish)	N/Av	None.
Solvent naphtha (petroleum), heavy aromatic	64742-94-5	3.6 mg/L (Rainbow trout)	N/Av	none
oleic acid	112-80-1	205 mg/L Fathead minnow	N/Av	None.

Ingredients	CAS No	Toxicity to Daphnia		
		EC50 / 48h	NOEC / 21 day	M Factor
Solvent naphtha (petroleum), medium aliphatic	64742-88-7	1.4 mg/L (Water flea)	0.48 mg/L QSAR NOEL (Water flea)	None.
2-Ethylhexyl nitrate	27247-96-7	> 12.6 mg/L [Daphnia magna (Water flea)]	N/Av	None.
Solvent naphtha (petroleum), heavy aromatic	64742-94-5	1.1 mg/L / (Water flea)	N/Av	none
oleic acid	112-80-1	N/Av	N/Av	None.

Ingredients	CAS No	Toxicity to Algae		
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor
Solvent naphtha (petroleum), medium aliphatic	64742-88-7	1 - 3 mg/L/72hr (Green algae)	1 mg/L/72hr (Green algae) NOEL	None.
2-Ethylhexyl nitrate	27247-96-7	N/Av	12.6mg/L/72hr(Green algae)	None.
Solvent naphtha (petroleum), heavy aromatic	64742-94-5	7.2 mg/L/72 hours (Green algae)	0.22 mg/L/72 hours (Green algae)	none
oleic acid	112-80-1	N/Av	N/Av	None.

Persistence and degradability

: No data is available on the product itself. The following ingredients are considered to be readily biodegradable: Solvent Naphtha (Petroleum) Medium Aliphatic

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

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Components	Partition coefficent n-octanol/ater (log Kow)	Bioconcentration factor (BCF)
Solvent naphtha (petroleum), medium aliphatic (CAS 64742-88-7)	N/Av	N/Av
2-Ethylhexyl nitrate (CAS 27247-96-7)	5.24	N/Av
Solvent naphtha (petroleum), heavy aromatic (CAS 64742-94-5)	>3- 6.5	N/Av
oleic acid (CAS 112-80-1)	7.64	10(calculated)

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. Contains material that may be harmful in the environment. 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. 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. (Aliphatic naphtha)	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. This product meets the criteria for an environmentally hazardous material according to the IMDG Code.				
TDG	UN1993	FLAMMABLE LIQUID, N.O.S. (Aliphatic naphtha)	3	III	
TDG Additional information	This material may be shipped as non-regulated material when in small means of containment (<450 Litres), provided the requirements of TDG section 1.33 are met. This product meets the criteria for an environmentally hazardous material according to the IMDG Code.				

Special precautions for user : Keep away from heat, sparks and open flame. - No smoking.

Environmental hazards : This mixture 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:

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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
Solvent naphtha (petroleum), medium aliphatic	64742-88-7	Yes	N/Ap	N/Ap	No	N/Ap
2-Ethylhexyl nitrate	27247-96-7	Yes	N/Ap	N/Av	No	N/Ap
Solvent naphtha (petroleum), heavy aromatic	64742-94-5	Yes	N/Ap	N/Ap	No	N/Ap
oleic acid	112-80-1	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:

Ingredients	CAS #	California Proposition 65		State "Right to Know" Lists					
		Listed	Type of Toxicity	CA	MA	MN	NJ	PA	RI
Solvent naphtha (petroleum), medium aliphatic	64742-88-7	No	Not listed	No	No	No	Yes	No	No
2-Ethylhexyl nitrate	27247-96-7	No	Not listed	No	No	No	No	No	No
Solvent naphtha (petroleum), heavy aromatic	64742-94-5	No	Not listed	No	No	No	No	No	No
oleic acid	112-80-1	No	Not listed	No	No	No	No	Yes	Yes

Canadian Information:

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).
WHMIS Classification: See Section 2. 111

International Information:

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

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Ingredients	CAS #	European EINECs	Australia AICS	Philippines PICCS	Japan ENCS	Korea KECI/KECL	China IECSC	NewZealand IOC
Solvent naphtha (petroleum), medium aliphatic	64742-88-7	265-191-7	Present	Present	(9)-1700	KE-31664	Present	May be used as a single component chemical under an appropriate group standard
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
Solvent naphtha (petroleum), heavy aromatic	64742-94-5	265-198-5	Present	Present	(3)-7	KE-31656	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

SECTION 16. OTHER INFORMATION

Legend : ACGIH: American Conference of Governmental Industrial Hygienists
AICS: Australian Inventory of Chemical Substances
CA: California
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR: Code of Federal Regulations
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
N/Ap: Not Applicable
N/Av: Not Available
NFPA: National Fire Protection Association
NJ: New Jersey
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
PA: Pennsylvania
PEL: Permissible exposure limit
PICCS: Philippine Inventory of Chemicals and Chemical Substances
RCRA: Resource Conservation and Recovery Act
RTECS: Registry of Toxic Effects of 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
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, CCInfoWeb databases, 2015 (Chempendium, RTECs, HSDB, INCHEM). OECD- The Global Portal to Information on Chemical Substances - eChemPortal, 2015 European Chemicals Agency, Classification Legislation, 2015 Material Safety Data Sheet from manufacturer Information taken from reference works and the literature. National occupational exposure limits

Preparation Date (mm/dd/yyyy) : 05/15/2015

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

HMIS Rating : *- Chronic hazard 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe

Health: *2 *Flammability:* 2 *Reactivity:* 0

NFPA Rating : 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe

Health: 2 *Flammability:* 2 *Instability:* 0 *Special Hazards:* 0

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

This Material 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 Material 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 MSDS does not apply to use with any other product or in any other process.
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