Super Fuel Stabilizer

SDS Preparation Date (mm/dd/yyyy): 06/15/2020

Page 1 of 20

SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

Product identifier used on the label

: Super Fuel Stabilizer

 $\textbf{Other means of identification:} \quad 00602,\,90602,\,00510P,\,00552D$

Recommended use of the chemical and restrictions on use

: Fuel additive.

No restrictions on use known.

Chemical family : Mixture.

Name, address, and telephone number

Name, address, and telephone number

Refer to supplier

of the supplier: of the manufacturer:

FPPF Chemical Company, Inc.

100 Dingens St.

Buffalo, NY, USA 14206

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

24 Hr. Emergency Tel # : PERS: North America 1-800-633-8253; International: +1-801-629-0667

Contract number: 8027

SECTION 2. HAZARDS IDENTIFICATION

Classification of the chemical

Amber liquid. Solvent odour.

Most important hazards: Flammable liquid and vapor. May be ignited by open flames and sparks. Causes skin and eye irritation. May cause an allergic skin reaction. May cause respiratory irritation. Contains material which can cause cancer. Contains material which can cause birth defects based on animal data.

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 Liquids - Category 3

Acute Toxiciy, inhalation - Category 4 (vapor)

Skin Irritation - Category 2

Eye Damage/Irritation - Category 2B

Skin sensitization - Category 1A

Aspiration Toxicity - Category 1

Reproductive toxicity - Category 2

Carcinogenicity- Category 2

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

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

Label elements

Hazard pictogram(s)



Signal Word



Super Fuel Stabilizer

SDS Preparation Date (mm/dd/yyyy): 06/15/2020

Page 2 of 20

SAFETY DATA SHEET

Hazard statement(s)

Flammable liquid and vapour. Harmful if inhaled.

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

May cause respiratory irritation.

May cause drowsiness and dizziness.

May be fatal if swallowed and enters airways.

Suspected of causing cancer.

Suspected of damaging the unborn child.

Precautionary statement(s)

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks and open flame - No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical and ventilating equipment. Use 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/clothing and eye/face protection. Contaminated work clothing must not be allowed out of the workplace. Wash hands and face thoroughly after handling.

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

IF exposed or concerned: Get medical attention/advice.

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

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

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.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

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

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

Other hazards

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

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	Common name and synonyms	CAS#	Concentration (% by weight
Light aromatic solvent naphtha	Aromatic solvent naphtha Solvent Naphtha (Petroleum) Light Aromatic	64742-95-6	Proprietary
2-Butoxy ethanol	Ethylene Glycol Monobutyl Ether EGBE	111-76-2	Proprietary
1,2,4 trimethylbenzene	Trimethylbenzene (mixed isomers) Methylxylenes	25551-13-7	Proprietary
1,2,4-Trimethylbenzene	Pseudocumene	95-63-6	Proprietary
1,3,5-Trimethyl benzene	Mesitylene Trimethylbenzol	108-67-8	Proprietary
1,2,3-Trimethylbenzenes		526-73-8	Proprietary
Cumene	Isopropyl benzene	98-82-8	Proprietary



FPPF Chemical Company, Inc. 100 Dingens St. Buffalo, NY, USA, 14206

Telephone: (800) 735-3773

Super Fuel Stabilizer

SDS Preparation Date (mm/dd/yyyy): 06/15/2020

Page 3 of 20

SAFETY DATA SHEET

2-Ethylhexyl nitrate	Ethylhexyl nitrate Nitric acid, 2-ethylhexyl ester	27247-96-7	Proprietary
Heavy aromatic solvent naphtha	Aromatic solvent naphtha Heavy Aromatic Naphtha	64742-94-5	Proprietary
Xylene (mixed isomers)	Dimethylbenzene Methyltoluene Xylol	1330-20-7	Proprietary
Ethylbenzene	Ethylbenzol; Phenylethane	100-41-4	Proprietary
Dimethylcyclohexylamine, N,N-	DMCHA; Dimethylcylcohexylamine; 2N,N-Dimethylcyclohexylamne	98-94-2	Proprietary
Phenol, 2,2'- [(1-methyl-1,2-ethanediyl)bis(nitrilomet hylidyne)]bis-	DMD	94-91-7	Proprietary
2-Ethylhexanol	2-Ethylhexyl Alcohol Ethylhexanol	104-76-7	Proprietary
Naphthalene	Moth balls Moth flakes Tar camphor	91-20-3	Proprietary

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 CENTER or doctor/physician. Do NOT

induce vomiting. Aspiration hazard 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. Call a

POISON CENTRE or doctor/physician if you feel unwell. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen by qualified medical

personnel only.

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

water/shower. Call a POISON CENTER or doctor/physician if you feel unwell. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, Eye contact

if present and easy to do. Continue rinsing. If eye irritation persists: get medical

advice/attention.

Super Fuel Stabilizer

SDS Preparation Date (mm/dd/yyyy): 06/15/2020

Page 4 of 20

SAFETY DATA SHEET

Most important symptoms and effects, both acute and delayed

: May cause an allergic skin reaction. Symptoms may include redness, blistering, pain and swelling. Causes skin irritation. Symptoms include redness, swelling and sloughing of skin cells (flaking).

Harmful if inhaled. Symptoms may include coughing, choking and wheezing. May cause respiratory irritation. Symptoms may include upper respiratory irritation, coughing and breathing difficulties.

May cause drowsiness or dizziness. Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects. Causes serious eye irritation. Symptoms may include redness, pain, tearing and conjunctivitis.

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.Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Suspected of causing cancer. Symptoms may include persistent coughing, shortness of breath, coughing up blood and wheezing.

Suspected of damaging the unborn child. Symptoms in offspring may include reduced fetal weight, behavioral effects, delayed skeletal formation and hearing loss.

Prolonged overexposure may cause liver and kidney effects. 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

: 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

Extinguishing media

Suitable extinguishing media

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

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

: Flammable liquid and vapour. Keep away from heat, sparks and open flames. This product will accumulate static charge by flow, splashing or agitation. After prolonged storage, may release explosive peroxides in the presence of air. Vapors may travel considerable distance to a source of ignition and flash back. Vapours may be heavier than air and may 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 Liquids - Category 3

Hazardous combustion products

: Carbon oxides. . Reactive hydrocarbons Polycyclic aromatic hydrocarbons . Aldehydes Nitrogen oxides . Unidentified organic compounds. 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



Super Fuel Stabilizer

SDS Preparation Date (mm/dd/yyyy): 06/15/2020

Page 5 of 20

SAFETY DATA SHEET

Move containers from fire area if safe to do so. Cool closed containers exposed to fire with water spray. 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.

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. Pick up and transfer to properly labeled containers. Contaminated absorbent material may pose the same hazards as the spilled product. Contact the proper local authorities.

Special spill response procedures

If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8802).

US CERCLA Reportable quantity (RQ): See section 15.

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. Use only outdoors or in a well-ventilated area. Keep away from heat, sparks and open flame - No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical and ventilating equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/clothing and eye/face protection. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Avoid breathing mist or vapours. Do not ingest. Do not eat, drink, smoke or use cosmetics while working with this product. Persons with recurrent skin eczema or sensitization problems should be excluded from working with this product. Once a person is sensitized, no further exposure to the material that caused the sensitization should be permitted. Avoid contact with skin, eyes and clothing. Avoid contact with incompatible materials.

Conditions for safe storage

Store in a well ventilated place. Keep cool. Keep container tightly closed. Store locked up. Store away from incompatibles and out of direct sunlight. 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. 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

: Strong oxidizing agents; Acids; Perchloric acid; Alkalies; Bases.



Super Fuel Stabilizer

SDS Preparation Date (mm/dd/yyyy): 06/15/2020

Page 6 of 20

SAFETY DATA SHEET

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:						
Chemical Name	ACGIH '	TLV_	OSHA F	OSHA PEL		
	<u>TWA</u>	STEL	<u>PEL</u>	STEL		
Light aromatic solvent naphtha	N/Av	N/Av	N/Av	N/Av		
2-Butoxy ethanol	20 ppm	N/Av	50 ppm (skin)	N/Av		
1,2,4 trimethylbenzene	25 ppm	N/Av	25 ppm (final rule limit)	N/Av		
1,3,5-Trimethyl benzene	25 ppm (mixed isomers)	N/Av	25 ppm (trimethylbenzene isomers) (final rule limit)	N/Av		
1,2,3-Trimethylbenzenes	25 ppm (trimethylbenzene isomers)	N/Av	N/Av	N/Av		
Cumene	50 ppm	N/Av	50 ppm (245 mg/m³) (Skin)	N/Av		
1,2,4-Trimethylbenzene	25 ppm (trimethylbenzene isomers)	N/Av	25 ppm (trimethylbenzene isomers) (final rule limit)	N/Av		
2-Ethylhexyl nitrate	N/Av	N/Av	N/Av	N/Av		
Heavy aromatic solvent naphtha	N/Av	N/Av	500 ppm (as petroleum distillates, naphtha)	N/Av		
Xylene (mixed isomers)	100 ppm	150 ppm	100 ppm (435 mg/m³)	N/Av		
Ethylbenzene	20 ppm	N/Av	100 ppm (435 mg/m³)	125ppm (545mg/m³)		
Dimethylcyclohexylamine, N,N-	N/Av	N/Av	N/Av	N/Av		
Phenol, 2,2'- [(1-methyl-1,2-ethanediyl)bis(nitril omethylidyne)]bis-	N/Av	N/Av	N/Av	N/Av		
2-Ethylhexanol	N/Av	N/Av	N/Av	N/Av		
Naphthalene	10 ppm (skin)	N/Av	10 ppm ; 50 mg/m ³	15ppm; 75mg		

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 electrical and ventilating 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.



Super Fuel Stabilizer

SDS Preparation Date (mm/dd/yyyy): 06/15/2020

Page 7 of 20

SAFETY DATA SHEET

Skin protection: Wear protective gloves/clothing. Persons with recurrent skin eczema or sensitization

problems should be excluded from working with this product. Once a person is sensitized, no further exposure to the material that caused the sensitization should be permitted. 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. Avoid contact with skin, eyes and clothing. Do not eat, drink, smoke or use cosmetics while working with this product. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. Contaminated work clothing must not be allowed out of the workplace. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Amber liquid.

Odour : Petroleum odor.

Odour threshold : N/Av
pH : N/Av
Melting Point/Freezing point : N/Av
Initial boiling point and boiling range

: N/Av

Flash point : 51°C / 124°F
Flashpoint (Method) : Tag closed cup

Evaporation rate (BuAe = 1) : < 1
Flammability (solid, gas) : N/Ap
Lower flammable limit (% by vol.)
: N/Av

h., ,,,,,,,)

Upper flammable limit (% by vol.)

: N/Av

Oxidizing properties : None known.

Explosive properties : N/Av
Vapour pressure : N/Av
Vapour density : >1

Relative density / Specific gravity

Solubility in water

: 0.79 : N/Av : N/Av

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



Super Fuel Stabilizer

SDS Preparation Date (mm/dd/yyyy): 06/15/2020 Page 8 of 20

SAFETY DATA SHEET

Flame projection length : N/Ap 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 will not occur. May be sensitive to static discharge. May form explosive peroxides during prolonged exposure to air and heat. Rate of peroxide

formation is not known.

Conditions to avoid : Keep away from heat, sparks and flame. Keep away from direct sunlight. Ensure

adequate ventilation, especially in confined areas. Take precautionary measures

against static discharge. Avoid contact with incompatible materials.

Incompatible materials : Strong oxidizing agents; Acids; Bases; Perchloric acid; Alkalies

Hazardous decomposition products

: None reported by the manufacturer. 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

Harmful by inhalation. Inhalation may cause respiratory irritation and central nervous system depression. May cause coughing and breathing difficulties. Symptoms include: Upper respiratory irritation, coughing, sneezing, staggering gait, giddiness, drowiness, slurred speech, nausea, and possible nervous system depression.

Sign and symptoms ingestion

Ingestion may irritate digestive tract and cause 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 : Harmful in contact with skin. May be absorbed through the skin, producing

symptoms similar to ingestion or inhalation.

Causes skin irritation. Symptoms include: Dryness, itching, cracking, burning,

redness and swelling.

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

conjunctivitis.

Potential Chronic Health Effects

: Prolonged or repeated contact may cause drying, cracking and defatting of the skin. Chronic overexposure to 2-butoxyethanol may cause liver, kidney and blood damage.

Prolonged overexposure may cause liver and kidney effects.

Mutagenicity : Not expected to be mutagenic in humans.



Super Fuel Stabilizer

SDS Preparation Date (mm/dd/yyyy): 06/15/2020

Page 9 of 20

SAFETY DATA SHEET

Carcinogenicity

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 Carcinogenicity- Category 2 Suspected of causing cancer.

Contains Naphthalene. Naphthalene is classified as carcinogenic by IARC (Group 2B) and NTP (Group 2 - Reasonably anticipated).

Contains Ethylbenzene. Ethylbenzene is classifed as carcinogenic by IARC (Group 2B)

and ACGIH (Category A3).

Reproductive effects & Teratogenicity

: 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 Reproductive toxicity - Category 2 Suspected of damaging the unborn child. Developmental

Contains Xylene (mixed isomers) Xylene may cause fetotoxic effects (e.g. reduced fetal weight, delayed ossification, behavioral effects) at doses which are not maternally toxic, based on animal data.

Sensitization to material

May cause an allergic skin reaction. Symptoms may include redness, itching and

swelling.

Not expected to be a 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 May cause drowsiness and dizziness. May cause respiratory irritation.

Not classified as specific target organ toxicity-repeated exposure.

Medical conditions aggravated by overexposure

Pre-existing skin, eye, respiratory and central nervous system disorders. Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is being used.

Synergistic materials

: None reported by the manufacturer.

Toxicological data

: The calculated ATE values for this mixture are:

ATE oral = 2283mg/kg ATE dermal = 2135mg/kg

ATE inhalation (vapours) =534mg/L/4H ATE inhalation (mists) = 16.0mg/L/4H

See below for individual ingredient acute toxicity data.



Super Fuel Stabilizer

SDS Preparation Date (mm/dd/yyyy): 06/15/2020

Page 10 of 20

SAFETY DATA SHEET

	LC ₅₀ (4hr)	LD50			
Chemical name	inh, rat	(Oral, rat)	(Rabbit, dermal)		
Light aromatic solvent naphtha	>17.7mg/L/4H (vapour)	8400 mg/kg	>3160 mg/kg		
2-Butoxy ethanol	450 ppm (2.175 mg/L)	530 mg/kg	400 - 500 mg/kg		
1,2,4 trimethylbenzene	18 - 24 mg/L (vapour)	8970 mg/kg	> 3160 mg/kg		
1,2,4-Trimethylbenzene	18 mg/L	5000 mg/kg	> 3160 mg/kg		
1,3,5-Trimethyl benzene	24 mg/L (vapour)	23 000 mg/kg	> 3160 mg/kg		
1,2,3-Trimethylbenzenes	N/Av	N/Av	N/Av		
Cumene	8000 ppm (39 mg/L) (vapour)	2260 mg/kg	10 627 mg/kg		
2-Ethylhexyl nitrate	> 14 mg/L	>10mg/L (>9600mg/kg)	>5 mL/kg (>4800mg/kg)		
Heavy aromatic solvent naphtha	> 17.1 mg/L/4 hours	> 6000 mg/kg	> 3160 mg/kg		
Xylene (mixed isomers)	6350 ppm (27.6 mg/L) (vapours)	3253 mg/kg	12 180 mg/kg		
Ethylbenzene	4000 ppm (17.4 mg/L) (vapour)	3500 mg/kg	15 380 mg/kg		
Dimethylcyclohexylamine, N,N-	1700 - 5800 mg/m³ (6hr); 2.08 - 7.1mg/L/4H	348 mg/kg	370 mg/kg		
Phenol, 2,2'- [(1-methyl-1,2-ethanediyl)bis(nitrilomethylidyne)]bis-		4560 mg/kg	>2000mg/kg (No mortality		
2-Ethylhexanol	≥1.2 - <5.3 mg/L	2052mg/kg	No information available.		
Naphthalene	No information available.	490 mg/kg	>20,000 mg/kg		

Other important toxicological hazards

: None known or reported by the manufacturer.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity: No data is available on the product itself.

See the following tables for individual ingredient ecotoxicity data.



SDS Preparation Date (mm/dd/yyyy): 06/15/2020

Page 11 of 20

SAFETY DATA SHEET

Ecotoxicity data:

	"	Toxicity to Fish				
<u>Ingredients</u>	CAS#	LC50 / 96h	NOEC / 21 day	M Factor		
Light aromatic solvent naphtha	64742-95-6	9.22 mg/L (Rainbow trout)	N/Av	None.		
2-Butoxy ethanol	111-76-2	1490 mg/L (Lepomis macrocrhius)	>100mg/L (Zebra fish)	none		
1,2,4 trimethylbenzene	25551-13-7	7.72 mg/L (Fathead minnow) (Read-across)	N/Av	None.		
1,3,5-Trimethyl benzene	108-67-8	12.52 mg/L (Goldfish)	N/Av	None.		
1,2,3-Trimethylbenzenes	526-73-8	N/Av	N/Av			
Cumene	98-82-8	4.8 mg/L (Rainbow trout)	N/Av	None.		
1,2,4-Trimethylbenzene	95-63-6	7.72 mg/L (Fathead minnow)	N/Av	None.		
2-Ethylhexyl nitrate	27247-96-7	2 mg/L (Zebra fish)	N/Av	None.		
Heavy aromatic solvent naphtha	64742-94-5	3.6 mg/L (Rainbow trout)	N/Av	none		
Xylene (mixed isomers)	1330-20-7	8.2 mg/L (Rainbow trout)	N/Av	None.		
Ethylbenzene	100-41-4	4.2 mg/L (Rainbow trout)	1.13 mg/L/30 days	None.		
Dimethylcyclohexylamine, N,N-	98-94-2	28mg/L (Rainbow trout)	N/Av	None.		
Phenol, 2,2'- [(1-methyl-1,2-ethanediyl)bis(nitril omethylidyne)]bis-	94-91-7	~46mg/L (Golden orfe)	N/Av	None.		
2-Ethylhexanol	104-76-7	17.1 mg/L (Golden orfe)	N/Av	None.		
Naphthalene	91-20-3	0.96 mg/L (pink salmon)	0.12mg/L (40 days) (pink salmon)	none		





SDS Preparation Date (mm/dd/yyyy): 06/15/2020

Page 12 of 20

SAFETY DATA SHEET

<u>Ingredients</u>	CAS#	Tox	icity to Daphnia	
		EC50 / 48h	NOEC / 21 day	M Factor
Light aromatic solvent naphtha	64742-95-6	6.16 mg/L (Daphnia magna)	N/Av	None.
2-Butoxy ethanol	111-76-2	835mg/L (Daphnia magna)	100mg/L (Daphnia magna)	none
1,2,4 trimethylbenzene	25551-13-7	2.7 mg/L (Daphnia magna) (Read-across)	0.4 mg/L (Read-across)	None.
1,3,5-Trimethyl benzene	108-67-8	6 mg/L (Daphnia magna)	N/Av	None.
1,2,3-Trimethylbenzenes	526-73-8	N/Av	N/Av	
Cumene	98-82-8	4 mg/L/24hr (Daphnia magna)	N/Av	None.
1,2,4-Trimethylbenzene	95-63-6	3.6mg/L (Daphnia magna)	N/Av	None.
2-Ethylhexyl nitrate	27247-96-7	> 12.6 mg/L [Daphnia magna (Water flea)]	N/Av	None.
Heavy aromatic solvent naphtha	64742-94-5	1.1 mg/L Water flea	N/Av	none
Xylene (mixed isomers)	1330-20-7	3.2 - 9.56 mg/L (Daphnia magna)	N/Av	None.
Ethylbenzene	100-41-4	1.81 mg/L (Daphnia magna)	N/Av	None.
Dimethylcyclohexylamine, N,N-	98-94-2	75 mg/L Daphnia magna (Water flea)	N/Av	None.
Phenol, 2,2'- [(1-methyl-1,2-ethanediyl)bis(nitril omethylidyne)]bis-	94-91-7	5.034mg/L Daphnia magna (Water flea)	N/Av	None.
2-Ethylhexanol	104-76-7	39mg/L (Daphnia magna)	N/Av	None.
Naphthalene	91-20-3	3.4 mg/L/ Water flea	0.6mg/L	none





SDS Preparation Date (mm/dd/yyyy): 06/15/2020

Page 13 of 20

SAFETY DATA SHEET

<u>Ingredients</u>	CAS#	То	xicity to Algae		
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor	
Light aromatic solvent naphtha	64742-95-6	N/Av	N/Av	N/Av	
2-Butoxy ethanol	111-76-2	911mg/L/72hr	286mg/L/72hr	none	
1,2,4 trimethylbenzene	25551-13-7	5.7 mg/L/72hr (Green algae) (Read-across)	0.38 mg/L/72hr (Read-across)	None.	
1,3,5-Trimethyl benzene	108-67-8	3.191 mg/L/96hr (Green algae) (QSAR)	N/Av	None.	
1,2,3-Trimethylbenzenes	526-73-8	N/Av	N/Av		
Cumene	98-82-8	2.6 mg/L/72hr (Green algae)	N/Av	None.	
1,2,4-Trimethylbenzene	95-63-6	2.356mg/L/96hr QSAR	N/Av	None.	
2-Ethylhexyl nitrate	27247-96-7	1.57 mg/L/72hr (Green algae)	12.6mg/L/72hr	None.	
Heavy aromatic solvent naphtha	64742-94-5	7.2 mg/L/72 hours (Green algae)	0.22 mg/L/72 hours (Green algae)	none	
Xylene (mixed isomers)	1330-20-7	3.2 - 4.9 mg/L/72hr (Green algae)	N/Av	None.	
Ethylbenzene	100-41-4	3.6 mg/L/96hr (Green algae)	3.4 mg/L/96hr	None.	
Dimethylcyclohexylamine, N,N-	98-94-2	>2.0mg/L (Green algae)	0.0625mg/L	None.	
Phenol, 2,2'- [(1-methyl-1,2-ethanediyl)bis(nitril omethylidyne)]bis-	94-91-7	10.27mg/L (Green algae)	N/Av	None.	
2-Ethylhexanol	104-76-7	16.6mg/L/72hr (Green algae)	N/Av	None.	
Naphthalene	91-20-3	0.4mg/L/72hr (Marine diatom)	N/Av	none	

Persistence and degradability

: No data is available on the product itself.

Bioaccumulation potential: No data is available on the product itself.

See the following data for ingredient information.



Super Fuel Stabilizer

SDS Preparation Date (mm/dd/yyyy): 06/15/2020

Page 14 of 20

SAFETY DATA SHEET

<u>Components</u>	Partition coefficient n-octanol/water (log Kow)	Bioconcentration factor (BCF)
Light aromatic solvent naphtha (CAS 64742-95-6)	2.1 - 6(calculated)	10 - 2500
2-Butoxy ethanol (CAS 111-76-2)	0.81 at 25 °C	0.97
Naphthalene (CAS 91-20-3)	3.7	30 - 430 species: fish
1,2,4-Trimethylbenzene (CAS 95-63-6)	3.78	31 - 275
Xylene (mixed isomers) (CAS 1330-20-7)	3.12 - 3.2	50 - 58
Heavy aromatic solvent naphtha (CAS 64742-94-5)	>3 - <6.5	No information available.
2-Ethylhexyl nitrate (CAS 27247-96-7)	5.24	No information available.
2-Ethylhexanol (CAS 104-76-7)	2.9	30
Dimethylcyclohexylamine, N,N-(CAS 98-94-2)	2.01 at 25 °C	19.8 - 35.66estimated
Ethylbenzene (CAS 100-41-4)	3.15	1.1 - 1.5
Phenol, 2,2'- [(1-methyl-1,2-ethanediyl)bis(niti lomethylidyne)]bis- (CAS 94-91-7)	3.6 r	No information available.
1,2,4 trimethylbenzene (CAS 25551-13-7)	3.63	42 - 328 (common carp)
1,3,5-Trimethyl benzene (CAS 108-67-8)	3.6 - 3.93	23 - 328
Cumene (CAS 98-82-8)	3.55	224 (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 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.





SDS Preparation Date (mm/dd/yyyy): 06/15/2020

Page 15 of 20

SAFETY DATA SHEET

SECTION 14. TRANSPORT INFORMATION

Regulatory Information	UN Number	UN proper shipping name	Transport hazard class(es)	Packing Group	Label
49CFR/DOT	UN1993	FLAMMABLE LIQUID, N.O.S. (Xylene)	3	III	3
49CFR/DOT Additional information		d as a Limited Quantity when transported in containe g (66 pounds) gross mass.	ers no larger than 5 L	(1.3 gallons); in packages no
TDG	UN1993	FLAMMABLE LIQUID, N.O.S. (Xylene)	3	III	3
TDG Additional information		the Limited Quantity Exemption may apply for cont R, refer to section 1.17 for Limited Quantity Exempt	•		•
ICAO/IATA	UN1993	Flammable liquid, n.o.s. (Xylene)	3	III	3
ICAO/IATA Additional information	Refer to ICAO/I	ATA Packing Instruction	!		•
IMDG	UN1993	FLAMMABLE LIQUID, N.O.S. (Xylene)	3	III	₹
IMDG Additional nformation	Consult the IMI	OG regulations for exceptions.	!		•

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





SDS Preparation Date (mm/dd/yyyy): 06/15/2020

Page 16 of 20

SAFETY DATA SHEET

<u>Ingredients</u>	0.4.0 //	TSCA	CERCLA Reportable	SARA TITLE III: Sec. 302, Extremely	SARA TITLE III: Sec. 313, 40 CFR 372, Specific Toxic Chemical		
	CAS#	Inventory	Quantity(RQ) (40 CFR 117.302):	Hazardous Substance, 40 CFR 355:	Toxic Chemical	de minimus Concentration	
Light aromatic solvent	64742-95-6	Yes	N/Ap	N/Ap	No	N/Ap	
2-Butoxy ethanol	111-76-2	Yes	N/Ap	N/Ap	No	N/Ap	
1,2,4 trimethylbenzene	25551-13-7	Yes	None.	None.	No	N/Ap	
1,3,5-Trimethyl benzene	108-67-8	Yes	None.	None.	No	N/Ap	
1,2,3-Trimethylbenzenes	526-73-8	Yes	N/Ap	N/Av	No	NS	
Cumene	98-82-8	Yes	5000 lb/ 2270 kg	None.	Yes	1%	
1,2,4-Trimethylbenzene	95-63-6	Yes	N/Ap	N/Ap	Yes	1%	
2-Ethylhexyl nitrate	27247-96-7	Yes	N/Ap	N/Ap	No	N/Ap	
Heavy aromatic solvent naphtha	64742-94-5	Yes	N/Ap	N/Ap	No	N/Ap	
Xylene (mixed isomers)	1330-20-7	Yes	100 lb/ 45.4 kg	N/Ap	Yes	1%	
Ethylbenzene	100-41-4	Yes	1000 lb/ 454 kg	N/Ap	Yes	0.1%	
Dimethylcyclohexylamine, N,N-	98-94-2	Yes	N/Ap	N/Ap	No	N/Ap	
Phenol, 2,2'- [(1-methyl-1,2-ethanediyl) bis(nitrilomethylidyne)]bis	94-91-7	Yes	N/Ap	N/Ap	No	N/Ap	
2-Ethylhexanol	104-76-7	Yes	N/Ap	N/Ap	No	N/Ap	
Naphthalene	91-20-3	Yes	100 lb/ 45.4 kg	N/Av	Yes	0.1%	

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes: Flammable; Acute toxicity; Skin irritation; Eye irritation; Skin sensitization; Carcinogenicity; Reproductive toxicity; Specific target organ toxicity, single exposure; Aspiration 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 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:





SDS Preparation Date (mm/dd/yyyy): 06/15/2020

Page 17 of 20

SAFETY DATA SHEET

Ingredients	CAS#	Californ	ia Proposition 65	State "Right to Know" Lists					
ingredients	CAS#	Listed	Type of Toxicity	CA	MA	MN	NJ	PA	RI
Light aromatic solvent naphtha	64742-95-6	No	Not listed	No	No	No	No	No	No
2-Butoxy ethanol	111-76-2	No	Not listed	Yes	Yes	Yes	Yes	Yes	Yes
1,2,4 trimethylbenzene	25551-13-7	No	N/Ap	Yes	Yes	Yes	Yes	Yes	Yes
1,3,5-Trimethyl benzene	108-67-8	No	N/Ap	Yes	Yes	No	No	No	No
1,2,3-Trimethylbenzenes	526-73-8	No	N/Ap	No	No	No	No	No	No
Cumene	98-82-8	Yes	Cancer	Yes	Yes	Yes	Yes	Yes	Yes
1,2,4-Trimethylbenzene	95-63-6	No	Not listed	No	Yes	Yes	Yes	Yes	No
2-Ethylhexyl nitrate	27247-96-7	No	Not listed	No	No	No	No	No	No
Heavy aromatic solvent naphtha	64742-94-5	No	Not listed	No	No	No	No	No	No
Xylene (mixed isomers)	1330-20-7	No	Not listed	Yes	Yes	Yes	Yes	Yes	Yes
Ethylbenzene	100-41-4	Yes	Cancer	Yes	Yes	Yes	Yes	Yes	Yes
Dimethylcyclohexylamine, N,N-	98-94-2	No	Not listed	No	No	No	Yes	No	No
Phenol, 2,2'- [(1-methyl-1,2-ethanediyl)bi s(nitrilomethylidyne)]bis-	94-91-7	No	Not listed	No	No	No	No	No	No
2-Ethylhexanol	104-76-7	No	Not listed	No	Yes	No	No	Yes	No
Naphthalene	91-20-3	Yes	Carcinogen	Yes	Yes	Yes	Yes	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.

International Information:

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



SDS Preparation Date (mm/dd/yyyy): 06/15/2020

Page 18 of 20

SAFETY DATA SHEET

<u>Ingredients</u>	CAS#	European EINECs	Australia AICS	Philippines PICCS	Japan ENCS	Korea KECI/KECL	China IECSC	NewZealand IOC
Light aromatic solvent naphtha	64742-95-6	265-199-0	Present	Present	(9)-1698	KE-31662	Present	May be used as a single component chemical under an appropriate group standard.
2-Butoxy ethanol	111-76-2	203-905-0	Present	Present	(7)-97; (2)-407	KE-04134	Present	HSR001154
1,2,4 trimethylbenzene	25551-13-7	247-099-9	Present	Present	(3)-7; (3)-3427	KE-34408	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.
1,3,5-Trimethyl benzene	108-67-8	203-604-4	Present	Present	(3)-7; (3)-3427	KE-34411	Present	HSR001229
1,2,3-Trimethylbenzenes	526-73-8	208-394-8	Present	Present	(3)-7; (3)-3427	KE-34409	Present	HSR004095
Cumene	98-82-8	202-704-5	Present	Present	(3)-32; (3)-22	KE-23957	Present	HSR001184
1,2,4-Trimethylbenzene	95-63-6	202-436-9	Present	Present	(3)-7; (3)-3427	KE-34410	Present	HSR001382
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.
Heavy aromatic solvent naphtha	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.
Xylene (mixed isomers)	1330-20-7	215-535-7	Present	Present	(3)-60; (3)-3	KE-35427	Present	HSR000983
Ethylbenzene	100-41-4	202-849-4	Present	Present	(3)-60; (3)-28	KE-13532	Present	HSR001151
Dimethylcyclohexylamine	98-94-2	202-715-5	Present	Present	(3)-2274	KE-11282	Present	HSR003584
N,N- Phenol, 2,2'- [(1-methyl-1,2-ethanediyl) bis(nitrilomethylidyne)]bis	94-91-7	202-374-2	Present	Present	(3)-513; (3)-1260	KE-23932	Present	May be used as a single component chemical under an appropriate group standard. Not approved for use as chemical in its own right.
2-Ethylhexanol	104-76-7	203-234-3	Present	Present	(2)-217	KE-13766	Present	HSR001386
Naphthalene	91-20-3	202-049-5	Present	Present	(4)-311	KE-25545	Present	HSR001287



Super Fuel Stabilizer

SDS Preparation Date (mm/dd/yyyy): 06/15/2020

Page 19 of 20

SAFETY DATA SHEET

SECTION 16. OTHER INFORMATION

Legend : ACGIH: American Conference of Governmental Industrial Hygienists

ATE: Acute Toxicity Estimate

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 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 HSDB: Hazardous Substances Data Bank

IARC: International Agency for Research on Cancer

Inh: Inhalation

IMDG: International Maritime Dangerous Goods KECI: Korean Existing Chemicals Inventory KECL: Korean Existing Chemicals List

LC: Lethal Concentration

I D: Lethal Dose

MA: Massachusetts MN: Minnesota

MSHA: Mine Safety and Health Administration

N/Ap: Not Applicable N/Av: Not Available

NIOSH: National Institute of Occupational Safety and Health

NOEC: No observable effect concentration

NTP: National Toxicology Program

NJ: New Jersey

NOEC: No observable effect concentration

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

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, (CHEMINFO, HSDB and RTECS).

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

European Chemicals Agency, Classification Legislation, 2015

Preparation Date (mm/dd/yyyy)

: 06/15/2020



Super Fuel Stabilizer

SDS Preparation Date (mm/dd/yyyy): 06/15/2020

Page 20 of 20

SAFETY DATA SHEET

Other special considerations for handling

: Provide adequate information, instruction and training for operators.

Prepared for:

FPPF Chemical Company, Inc. 100 Dingens St. Buffalo, NY, USA 14206 Telephone: 1-800-735-3773

Please direct all enquiries to FPPF Chemical Company

DISCLAIMER

The information in the Safety Data Sheet is offered for your consideration and guidance when exposed to this product. FPPF Chemical Company, Inc expressly disclaim all expressed or implied warranties and assume no responsibilities for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.

This Safety Data Sheet may not be changed, or altered in any way without the expressed knowledge and permission of FPPF Chemical Company, Inc.

END OF DOCUMENT