FPPF CHEMICAL CO., INC.



SAFETY DATA SHEET

Issue Date 01-Jun-2015

Revision Date 05-Jun-2015

Version 1

1. IDENTIFICATION

Product Identifier

Product Name

Custom Formula Winter

Other Means Of Identification

Product Code

Various

Recommended use of the Chemical and Restrictions on Use

Recommended Use

Diesel fuel treatment

Uses Advised Against

No restrictions on use known

Chemical Family

Mixture

Details of the Supplier of the Safety Data Sheet

Supplier Address

FPPF Chemical Co., Inc., 117 West Tupper St., Buffalo, N.Y. 14201, 716-856-9607

Emergency Telephone

Chemtrec 1-800-424-9300(U.S.) 703-527-3887(Outside U.S.)

2. HAZARDS IDENTIFICATION

<u>Classification</u> Colorless to slightly hazy liquid. Amber liquid. Slight Petroleum odor.

This Chemical is considered Hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)(Hazcom 2012) & Canadian WHMIS reg. (hazardous Product Regulations)(WHNIS 2015)

Flammable Liquid	Category 3
Acute Toxicity-Inhalation	Category 4(Vapor)
Aspiration Toxicity	Category 1
Reproductive Toxicity	Category 2(Developmental)
Specific Target Organ Toxicity (Single Exposure)	Category 3 (CNS)
Specific Target Organ Toxicity, Single Exposure	Category 3(Respiratory)
Carcinogenicity	Category 2



<u>Label Elements</u> Hazard pictogram(s)

Emergency Overview

Danger

Hazard Statements

Flammable Liquid & Vapor

Harmful if inhaled

May be fatal if swallowed and enters airways

May cause respiratory irritation

May cause drowsiness & dizziness Suspected of damaging the unborn child Suspected of causing cancer

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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.

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 CENTRE or doctor/physician if you feel unwell.

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

IF SWALLOWED: Immediately call a POISON CENTRE 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

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 may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Prolonged or repeated contact may cause drying, cracking and defatting of the skin.

Environmental precautions: Avoid release to the environment. See ECOLOGICAL INFORMATION, Section 12.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	Common name and synonyms	CAS#	Concentration
Light aromatic solvent naphtha	Aromatic solvent naphtha Solvent Naphtha (Petroleum) Light Aromatic	64742-95-6	50.0 - 60.0
Naphthalene	Moth balls Moth flakes Tar camphor	91-20-3	0.1 - 0.9
1,2,4-Trimethylbenzene	Pseudocumene	95-63-6	18.0 - 22.0
Xylene (mixed isomers)	Dimethylbenzene Methyltoluene Xylol	1330-20-7	1.5 - 3.0
Heavy aromatic solvent naphtha	Aromatic solvent naphtha Heavy Aromatic Naphtha	64742-94-5	0.5 - 2.0
1,3,5-Trimethyl benzene	Mesitylene Trimethylbenzol	108-67-8	1.5 - 3.5
2-Ethylhexyl nitrate	Nitric acid, 2-ethylhexyl ester Ethylhexyl nitrate	27247-96-7	1.0 - 3.0
trimethylbenzene	Trimethylbenzene (mixed isomers) Methylxylenes	25551-13-7	1.0 - 2.0
Cumene	Isopropyl benzene; Cumol, 2-Phenyl propane	98-82-8	0.5 - 1.5
Ethylbenzene	Ethylbenzol Phenylethane	100-41-4	0.1 - 0.5

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. 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.

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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.

Skin contact

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

Eve contact

: Flush eyes with water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue rinsing.

Most important symptoms and effects, both acute and delayed

: IF exposed or concerned: Get medical attention/advice.
Harmful if inhaled. Symptoms may include coughing, choking and wheezing.
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,

May cause drowsiness and dizziness. Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects. Suspected of causing cancer. Symptoms may include persistent coughing, shortness of breath, coughing up blood and wheezing.

Suspected of damaging the unborn child. Symptoms may include reduced fetal weight,

delayed ossification and persistent behavioural effects. Direct skin contact may cause slight or mild, transient irritation. Direct eye contact may cause slight or mild, transient irritation.

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

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. May accumulate static charge by flow or agitation. 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 Liquid - Category 3

Hazardous combustion products

: Carbon oxides. Polycyclic aromatic hydrocarbons. Reactive hydrocarbons. 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. 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.

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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 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):

Naphthalene (100 lbs / 45.4 kg) Xylene (100 lbs / 45.4 kg) Cumene (5000 lbs / 2270 kg) Ethylbenzene (1000 lbs / 454 kg)

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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. Avoid breathing mist or vapours. Do not ingest. Do not eat, drink, smoke or use cosmetics while working with this product. 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. 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. Inspec periodically for damage or leaks. No smoking in the area.

Incompatible materials

Strong oxidizing agents. .

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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Exposure Limits:

Chemical Name	ACGIH	TLV	OSHA PEL		
	<u>TWA</u>	<u>STEL</u>	PEL	STEL	
Light aromatic solvent naphtha	N/Av	N/Av	N/Av	N/Av	
Naphthalene	10 ppm (skin)	N/Av	10 ppm ; 50 mg/m³	15ppm; 75mg/m³	
1,2,4-Trimethylbenzene	25 ppm (trimethylbenzene isomers)	N/Av	25 ppm (trimethylbenzene isomers) (final rule limit)	N/Av	
Xylene (mixed isomers)	100 ppm	150 ppm	100 ppm (435 mg/m³)	N/Av	
Heavy aromatic solvent naphtha	N/Av	N/Av	500 ppm (as petroleum distillates, naphtha)	N/Av	
1,3,5-Trimethyl benzene	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	
trimethylbenzene	25 ppm	N/Av	25 ppm (final rule limit)	N/Av	
Cumene	50 ppm	N/Av	50 ppm ; 245 mg/m³ (Skin)	N/Av	
Ethylbenzene	20 ppm	N/Av	100 ppm (435 mg/m³)	125ppm (545mg/m³)	

Exposure controls

Ventilation and engineering measures

- : Use only outdoors or in a well-ventilated area. Use explosion-proof electrical and ventilating equipment. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. In case of insufficient ventilation wear suitable respiratory equipment.
- Respiratory protection : If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable approved respiratory protection. If the TLV is

exceeded, a NIOSH/MSHA-approved respirator is advised. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134) or CSA Z94.4-02.

accordance with OSHA (29 CFR 1910.134) or CSA 294.4-02.

Skin protection: Wear protective gloves/clothing. Where extensive exposure to

: 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.

wear eye/race protection. Chemical splash goggles are recommended.

A full face shield may also be necessary.

Other protective equipment : Ensure that eyewa

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. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

: Clear to slightly hazy amber liquid.

Odour

: Solvent odor.

Odour threshold

: N/Av

рН

N/Av

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Melting/Freezing point

: N/Av

Initial boiling point and boiling range

: >149°C / 300°F

Flash point

: 48.3°C / 119°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.)

: N/Av

Upper flammable limit (% by vol.)

: N/Av

Oxidizing properties

: None known.

Explosive properties

· N/Av

Vapour pressure

<4mm Hg @ 20°C

Vapour density

. <1

Relative density / Specific gravity

: 0.891

Solubility in water

: Partially soluble.

Other solubility(ies)

· NI/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)

: 90%(approximately)

Volatile organic Compounds (VOC's)

: N/Av

Absolute pressure of container

: N/Ap

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.

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. : Strong oxidizing agents. .

Incompatible materials : 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

: NO

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Potential Health Effects:

Signs and symptoms of short-term (acute) exposure

Sign and symptoms Inhalation

Harmful if inhaled. Symptoms may include coughing, choking and wheezing. Inhalation may cause respiratory irritation and central nervous system depression. Symptoms include: Upper respiratory irritation, coughing, sneezing, staggering gait, giddiness, drowiness, slurred speech, nausea, and possible nervous system depression.

Sign and symptoms ingestion

: 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 irritate digestive tract and cause nausea, vomiting and diarrhea. Ingestion may cause symptoms similar to inhalation.

Sign and symptoms skin

: May cause skin irritation. Symptoms may include mild redness and swelling.

Sign and symptoms eyes

: May cause eye irritation. Symptoms may include stinging and tearing.

Potential Chronic Health Effects

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

Mutagenicity

: Not expected to be mutagenic in humans.

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).

Contains Cumene. Cumene is classified as possibly carcinogenic by IARC (Group 2B).

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

Not expected to be a skin sensitizer.

Not expected to be a respiratory sensitizer.

Specific target organ effects

Eyes, skin, respiratory system, digestive system, central nervous system, blood 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 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.

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Synergistic materials

: None reported by the manufacturer.

Toxicological data

: The calculated ATE values for this mixture are:

ATE oral = 19309.6mg/kg ATE dermal = 3060mg/kg

ATE inhalation (vapours) =15.3mg/L/4H ATE inhalation (mists) = 1005.9mg/L/4H

See below for individual ingredient acute toxicity data.

LC50(4hr)	LC	D ₅₀
inh, rat	(Oral, rat)	(Rabbit, dermal)
>17.7mg/L/4H (vapour)	8400 mg/kg	>3160 mg/kg
No information available.	490 mg/kg	>20,000 mg/kg
18 mg/L	5000 mg/kg	> 3160 mg/kg
6350 ppm (27.6 mg/L) (vapours)	3253 mg/kg	12 180 mg/kg
> 17.1 mg/L/4 hours	> 6000 mg/kg	> 3160 mg/kg
24 mg/L (vapour)	23 000 mg/kg	> 3160 mg/kg
> 14 mg/L	> 9600 mg/kg	> 4800 mL/kg
18 - 24 mg/L (vapour)	8970 mg/kg	> 3160 mg/kg
8000 ppm; (39 mg/L) (vapor)	2260 mg/kg	10 627 mg/kg
4000 ppm (17.4 mg/L) (vapour)	3500 mg/kg	15 380 mg/kg
	inh, rat >17.7mg/L/4H (vapour) No information available. 18 mg/L 6350 ppm (27.6 mg/L) (vapours) > 17.1 mg/L/4 hours 24 mg/L (vapour) > 14 mg/L 18 - 24 mg/L (vapour) 8000 ppm; (39 mg/L) (vapor)	inh, rat (Oral, rat) >17.7mg/L/4H (vapour) 8400 mg/kg No information available. 490 mg/kg 18 mg/L 5000 mg/kg 6350 ppm (27.6 mg/L) (vapours) 3253 mg/kg > 17.1 mg/L/4 hours > 6000 mg/kg 24 mg/L (vapour) 23 000 mg/kg > 14 mg/L > 9600 mg/kg 18 - 24 mg/L (vapour) 8970 mg/kg 8000 ppm; (39 mg/L) (vapor) 2260 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.

Ecotoxicity data:

In our all and a		Toxicity to Fish				
<u>Ingredients</u>	CAS No	LC50 / 96h	NOEC / 21 day	M Factor		
Light aromatic solvent naphtha	64742-95-6	9.22 mg/L (Rainbow trout)	N/Av	None.		
Naphthalene	91-20-3	0.96 mg/L (pink salmon)	0.12mg/L (40 days) (pink salmon)	None.		
1,2,4-Trimethylbenzene	95-63-6	7.72 mg/L (Fathead minnow)	N/Av	None.		
Xylene (mixed isomers)	1330-20-7	8.2 mg/L (Rainbow trout)	N/Av	None.		
Heavy aromatic solvent naphtha	64742-94-5	3.6 mg/L (Rainbow trout)	N/Av	None.		
1,3,5-Trimethyl benzene	108-67-8	12.52 mg/L (Goldfish)	N/Av	None.		
2-Ethylhexyl nitrate	27247-96-7	2 mg/L (Zebra fish)	N/Av	None.		
trimethylbenzene	25551-13-7	7.72 mg/L (Fathead minnow) (Read-across)	N/Av	None.		
Cumene	98-82-8	4.5 mg/L (Rainbow trout)	0.38mg/L QSAR	None.		
Ethylbenzene	100-41-4	4.2 mg/L (Rainbow trout)	1.13 mg/L(30 days)	None.		

<u>Ingredients</u>	CAS No	Toxicity 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.		
Naphthalene	91-20-3	3.4 mg/L/ (Water flea)	0.6mg/L	None.		
1,2,4-Trimethylbenzene	95-63-6	3.6mg/L (Daphnia magna)	N/Av	None.		
Xylene (mixed isomers)	1330-20-7	3.2 - 9.56 mg/L (Daphnia magna)	N/Av	None.		
Heavy aromatic solvent naphtha	64742-94-5	1.1 mg/L (Water flea)	N/Av	None.		
1,3,5-Trimethyl benzene	108-67-8	6 mg/L (Daphnia magna)	0.4mg/L	None.		
2-Ethylhexyl nitrate	27247-96-7	> 12.6 mg/L (Daphnia magna)	N/Av	None.		
trimethylbenzene	25551-13-7	2.7 mg/L (Daphnia magna) (Read-across);	0.4 mg/L (Read-across);	None.		
Cumene	98-82-8	2.14 mg/L/24hr (Daphnia magna)	0.35mg/L	None.		
Ethylbenzene	100-41-4	1.81 mg/L (Daphnia magna)	N/Av	None.		

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Ingredients	CAS No	Т		
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor
Light aromatic solvent naphtha	64742-95-6	N/Av	N/Av	N/Av
Naphthalene	91-20-3	0.4mg/L/72hr (Marine diatom)	N/Av	None.
1,2,4-Trimethylbenzene	95-63-6	2.356mg/L/96hr QSAR	N/Av	None.
Xylene (mixed isomers)	1330-20-7	3.2 - 4.9 mg/L/72hr (Green algae)	N/Av	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.
1,3,5-Trimethyl benzene	108-67-8	3.191 mg/L/96hr (Green algae) (QSAR)	N/Av	None.
2-Ethylhexyl nitrate	27247-96-7	1.57 mg/L/72hr (Green algae)	12.6 mg/L/72hr	None.
trimethylbenzene	25551-13-7	5.7 mg/L/72hr (Green algae) (Read-across);	0.38 mg/L/72hr (Read-across);	None.
Cumene	98-82-8	1.29 mg/L/72hr (Green algae)	0.73mg/L	None.
Ethylbenzene	100-41-4	3.6 mg/L/96hr (Green algae)	3.4 mg/L/96hr	None.

Persistence and degradability

: No data is available on the product itself. None of these ingredients are considered to be readily biodegradable.

Bioaccumulation potential

: No data is available on the product itself.

See the following data for ingredient information.

Components	Partition coefficent n-octanol/ater (log Kow)	Bioconcentration factor (BCF)
Light aromatic solvent naphtha (CAS 64742-95-6)	2.1 - 6(calculated)	10 - 2500
Naphthalene (CAS 91-20-3)	3.7	427
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)	2.9 - 6.1	No information available.
1,3,5-Trimethyl benzene (CAS 108-67-8)	3.6 - 3.93	23 - 328
2-Ethylhexyl nitrate (CAS 27247-96-7)	5.24	No information available.
trimethylbenzene (CAS 25551-13-7)	3.63	42 - 328
Cumene (CAS 98-82-8)	3.55 at 23 °C	224
Ethylbenzene (CAS 100-41-4)	3.15	1.1 - 1.5

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.

SECTION 14. TRANSPORTATION INFORMATION

Regulatory Information	UN Number	UN proper s	hipping name	Transport hazard class(es)	Packing Group	Label
49CFR/DOT	UN1993	FLAMMABLE LIQUID, N.O.S. Trimethylbenzene)	(Aromatic naphtha;	3	III	3
49CFR/DOT Additional information	49 CFR Section	r road or rail shipment if package 173.150. ets the criteria for an environmen			•	er to
TDG	UN1993	FLAMMABLE LIQUID, N.O.S. Trimethylbenzene)	(Aromatic naphtha;	3	III :	₹ <u>₹</u>
TDG Additional information	the requirements	ay be shipped as non-regulated m s of TDG section 1.33 are met. ets the criteria for an environmen				ded

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:

<u>Ingredients</u>	CAS#	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 naphtha	64742-95-6	Yes	N/Ap	N/Ap	No	N/Ap	
Naphthalene	91-20-3	Yes	100 lb/ 45.4 kg	N/Av	Yes	0.1%	
1,2,4-Trimethylbenzene	95-63-6	Yes	N/Ap	N/Ap	Yes	1%	
Xylene (mixed isomers)	1330-20-7	Yes	100 lb/ 45.4 kg	None.	Yes	1%	
Heavy aromatic solvent naphtha	64742-94-5	Yes	N/Ap	N/Av	No	N/Ap	
1,3,5-Trimethyl benzene	108-67-8	Yes	N/Ap	N/Ap	No	N/Ap	
2-Ethylhexyl nitrate	27247-96-7	Yes	N/Ap	N/Ap	No	N/Ap	
trimethylbenzene	25551-13-7	Yes	N/Ap	N/Ap	No	N/Ap	
Cumene	98-82-8	Yes	5000 lb/ 2270 kg	N/Ap	Yes	11% 1111	
Ethylbenzene	100-41-4	Yes	1000 lb/ 454 kg	N/Ap	Yes	0.1%	

SARA TITLE III: Sec. 311 and 312, MSDS Requirements, 40 CFR 370 Hazard Classes: Fire Hazard; Acute Health Hazard; Chronic 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	California Proposition 65 CAS #			State "Right to Know" Lists					
myredients	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
Naphthalene	91-20-3	Yes	Carcinogen	Yes	Yes	Yes	Yes	Yes	Yes
1,2,4-Trimethylbenzene	95-63-6	No	Not listed	No	Yes	Yes	Yes	Yes	No
Xylene (mixed isomers)	1330-20-7	No	Not listed	Yes	Yes	Yes	Yes	Yes	Yes
Heavy aromatic solvent naphtha	64742-94-5	No	Not listed	No	No	No	No	No	No
1,3,5-Trimethyl benzene	108-67-8	No	Not listed	Yes	Yes	No	No	No	No
2-Ethylhexyl nitrate	27247-96-7	No	Not listed	No	No	No	No	No	No
trimethylbenzene	25551-13-7	No	Not listed	Yes	Yes	Yes	Yes	Yes	Yes
Cumene	98-82-8	Yes	Carcinogen	Yes	Yes	Yes	Yes	Yes	Yes
Ethylbenzene	100-41-4	Yes	Cancer	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:

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
Naphthalene	91-20-3	202-049-5	Present	Present	(4)-311	KE-25545	Present	HSR001287
1,2,4-Trimethylbenzene	95-63-6	202-436-9	Present	Present	(3)-7; (3)-3427	KE-34410	Present	HSR001382
Xylene (mixed isomers)	1330-20-7	215-535-7	Present	Present	(3)-60; (3)-3	KE-35427	Present	H\$R000983
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
1,3,5-Trimethyl benzene	108-67-8	203-604-4	Present	Present	(3)-7; (3)-3427	KE-34411	Present	HSR001229
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
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.
Cumene	98-82-8	202-704-5	Present	Present	(3)-32; (3)-22	KE-23957	Present	HSR001184
Ethylbenzene	100-41-4	202-849-4	Present	Present	(3)-60; (3)-28	KE-13532	Present	HSR001151

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

HMIS: Hazardous Materials Identification System 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

MN: Minnesota MA: Massachusetts LD: Lethal Dose

MSHA: Mine Safety and Health Administration

LC: Lethal Concentration

RTECS: Registry of Toxic Effects of Chemical Substances RI: Rhode Island RCRA: Resource Conservation and Recovery Act PICCS: Philippine Inventory of Chemicals and Chemical Substances PEL: Permissible exposure limit PA: Pennsylvania OSHA: Occupational Safety and Health Administration OECD: Organisation for Economic Co-operation and Development NOEC: No observable effect concentration NJ: New Jersey NTP: National Toxicology Program NOEC: No observable effect concentration NIOSH: National Institute of Occupational Safety and Health NFPA: National Fire Protection Association AVAv: Not Available NAp: Not Applicable

: Provide adequate information, instruction and training for operators.

Information taken from reference works and the literature.

European Chemicals Agency, Classification Legislation, 2015

WHMIS: Workplace Hazardous Materials Identification System

SARA: Superfund Amendments and Reauthorization Act

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

Canadian Centre for Occupational Health and Safety (CCOHS), CCInfoWeb

TDG: Canadian Transportation of Dangerous Goods Act & Regulations

Material Safety Data Sheet from manufacturer

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

STEL: Short Term Exposure Limit

databases, 2015 (CHEMINFO, HSDB and RTECS).

TCC Compliance Center

This Material Safety Data Sheet may not be changed, or altered in any way without the expressed knowledge and

responsibilities for the accuracy or completeness of the data contained herein. The data in this MSDS does not apply to Center Inc and FPPF Chemical Company, Inc expressly disclaim all expressed or implied warranties and assume no Safety Data Sheet is offered for your consideration and guidance when exposed to this product. ICC The Compliance obtained from FPPF Chemical Company, Inc and CCOHS' Web Information Service. The information in the Material This Material Safety Data Sheet was prepared by ICC The Compliance Center Inc using information provided by /

DISCLAIMER

Other special considerations for handling

06/01/2015

use with any other product or in any other process.

http://www.thecompliancecenter.com

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Preparation Date (mm/dd/yyyy)

References

SAFETY DATA SHEET

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