

Safety Data Sheet

Issue Date: 17-Aug-2015

Revision Date: 02-Sep-2015

Version 1

1. IDENTIFICATION

Product Identifier

Product Name PURUS Diesel Fuel Additive

Other means of identification

One Pint; One Quart

SDS # PUR-032 , PIN4942, PIN4944

Recommended use of the chemical and restrictions on use

Recommended Use Diesel fuel additive

Details of the supplier of the safety data sheet

Supplier Address

Warren Oil Company
915 E. Jefferson Ave.
West Memphis, AR 72301

Manufactured for:

AIOD
P.O. Box 1861
Montrose, CO 81402-1861
970-249-6336 www.purusproducts.com

Emergency Telephone Number

Company Phone Number 1-800-428-9284
Emergency Telephone (24 hr) CHEMTREC 1-800-424-9300 (North America) 1-703-527-3887 (International)

2. HAZARDS IDENTIFICATION

Physical State Liquid

Classification

Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1B
Aspiration toxicity	Category 1

Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed
May be harmful in contact with skin
Causes mild skin irritation

Signal Word

Danger

Hazard Statements

May cause genetic defects
May cause cancer
May be fatal if swallowed and enters airways

**Precautionary Statements - Prevention**

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 Do not induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Hazards

Toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Light aliphatic solvent naphtha	64742-48-9	80-90
2-Ethylhexyl Nitrate	27247-96-7	1-10
Naphtha (petroleum), heavy aromatic	64742-94-5	<5
Heavy Aromatic Naptha	64742-95-6	<5
1,2,4 Trimethylbenzene	95-63-6	<5
Naphthalene	91-20-3	<1

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

General Advice	If exposed or concerned: Get medical advice/attention.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes.
Inhalation	Remove to fresh air.
Ingestion	Immediately call a poison center or doctor/physician. Do not induce vomiting.

Most important symptoms and effects

Symptoms	May be harmful if swallowed. May be harmful in contact with skin. Causes mild skin irritation. May cause genetic defects. May cause cancer. May be fatal if swallowed and enters airways.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Not determined.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal Precautions	Use personal protective equipment as required.
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Methods and material for containment and cleaning up

Methods for Containment	Prevent further leakage or spillage if safe to do so.
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Methods for Clean-Up	Keep in suitable, closed containers for disposal.
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7. HANDLING AND STORAGE**Precautions for safe handling**

Advice on Safe Handling	Handle in accordance with good industrial hygiene and safety practice. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.
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Conditions for safe storage, including any incompatibilities

Storage Conditions	Store locked up.
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Incompatible Materials	None known based on information supplied.
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8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
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1,2,4 Trimethylbenzene 95-63-6	-	-	TWA: 25 ppm TWA: 125 mg/m ³
1,3,5-Trimethylbenzene 108-67-8	-	-	TWA: 25 ppm TWA: 125 mg/m ³
Naphthalene 91-20-3	TWA: 10 ppm S*	TWA: 10 ppm TWA: 50 mg/m ³ (vacated) TWA: 10 ppm (vacated) TWA: 50 mg/m ³ (vacated) STEL: 15 ppm (vacated) STEL: 75 mg/m ³	IDLH: 250 ppm TWA: 10 ppm TWA: 50 mg/m ³ STEL: 15 ppm STEL: 75 mg/m ³

Appropriate engineering controls

Engineering Controls Showers. Eyewash stations. Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Refer to 29 CFR 1910.133 for eye and face protection regulations.

Skin and Body Protection Refer to 29 CFR 1910.138 for appropriate skin and body protection.

Respiratory Protection Refer to 29 CFR 1910.134 for respiratory protection requirements.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Odor	Not determined
Appearance	Not determined	Odor Threshold	Not determined
Color	Not determined		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not determined	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	Not determined	
Flash Point	Not determined	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Not determined	
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Specific Gravity	Not determined	
Water Solubility	Not determined	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Product Information**

Eye Contact	Avoid contact with eyes.
Skin Contact	May be harmful in contact with skin. Causes mild skin irritation.
Inhalation	Do not inhale.
Ingestion	May be harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Light aliphatic solvent naphtha 64742-48-9	> 5000 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	-
2-Ethylhexyl Nitrate 27247-96-7	> 2000 mg/kg (Rat)	> 4820 mg/kg (Rabbit)	> 14 mg/L (Rat) 4 h
Naphtha (petroleum), heavy aromatic 64742-94-5	> 5000 mg/kg (Rat)	> 2 mL/kg (Rabbit)	> 590 mg/m ³ (Rat) 4 h
1,2,4 Trimethylbenzene 95-63-6	= 3280 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	= 18 g/m ³ (Rat) 4 h
Heavy Aromatic Naptha 64742-95-6	= 8400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 3400 ppm (Rat) 4 h
1,3,5-Trimethylbenzene 108-67-8	= 5000 mg/kg (Rat)	-	= 24 g/m ³ (Rat) 4 h
Naphthalene 91-20-3	= 490 mg/kg (Rat) = 1110 mg/kg (Rat)	(> 20 g/kg (Rabbit) = 1120 mg/kg (Rabbit)	> 340 mg/m ³ (Rat) 1 h
Propyl benzene 103-65-1	= 6040 mg/kg (Rat)	-	= 65000 ppm (Rat) 2 h

Information on physical, chemical and toxicological effects

Symptoms Please see Section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Germ cell mutagenicity May cause genetic defects.

Carcinogenicity May cause cancer.

Chemical Name	ACGIH	IARC	NTP	OSHA
2-Ethylhexyl Nitrate 27247-96-7		Group 2A		X
Naphthalene 91-20-3	A3	Group 2A	Reasonably Anticipated	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2A - Probably Carcinogenic to Humans

NTP (National Toxicology Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Aspiration hazard May be fatal if swallowed and enters airways.

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Light aliphatic solvent naphtha 64742-48-9		2200: 96 h Pimephales promelas mg/L LC50		2.6: 96 h Chaetogammarus marinus mg/L LC50
2-Ethylhexyl Nitrate 27247-96-7		116: 48 h Salmo gairdneri mg/L LC50 static		
Naphtha (petroleum), heavy aromatic 64742-94-5	2.5: 72 h Skeletonema costatum mg/L EC50	41: 96 h Pimephales promelas mg/L LC50 1740: 96 h Lepomis macrochirus mg/L LC50 static 45: 96 h Pimephales promelas mg/L LC50 flow-through 19: 96 h Pimephales promelas mg/L LC50 static 2.34: 96 h Oncorhynchus mykiss mg/L LC50		0.95: 48 h Daphnia magna mg/L EC50
1,2,4 Trimethylbenzene 95-63-6		7.19 - 8.28: 96 h Pimephales promelas mg/L LC50 flow- through		6.14: 48 h Daphnia magna mg/L EC50
Heavy Aromatic Naptha 64742-95-6		9.22: 96 h Oncorhynchus mykiss mg/L LC50		6.14: 48 h Daphnia magna mg/L EC50
1,3,5-Trimethylbenzene 108-67-8		3.48: 96 h Pimephales promelas mg/L LC50		50: 24 h Daphnia magna mg/L EC50
Naphthalene 91-20-3	0.4: 72 h Skeletonema costatum mg/L EC50	5.74 - 6.44: 96 h Pimephales promelas mg/L LC50 flow- through 1.6: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.91 - 2.82: 96 h Oncorhynchus mykiss mg/L LC50 static 1.99: 96 h Pimephales promelas mg/L LC50 static 31.0265: 96 h Lepomis macrochirus mg/L LC50 static		2.16: 48 h Daphnia magna mg/L LC50 1.96: 48 h Daphnia magna mg/L EC50 Flow through 1.09 - 3.4: 48 h Daphnia magna mg/L EC50 Static

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
2-Ethylhexyl Nitrate 27247-96-7	4.14
Naphtha (petroleum), heavy aromatic 64742-94-5	2.9 - 6.1
1,2,4 Trimethylbenzene 95-63-6	3.63
Naphthalene 91-20-3	3.3
Propyl benzene 103-65-1	3.68

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

US EPA Waste Number

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Naphthalene 91-20-3	U165	Included in waste streams: F024, F025, F034, F039, K001, K035, K060, K087, K145		U165

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes

Naphthalene 91-20-3			Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	
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California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Naphthalene 91-20-3	Toxic

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT Not regulated

IATA Not regulated

IMDG
Marine Pollutant This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION**International Inventories**

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Light aliphatic solvent naphtha	Present	X		Present		Present	X	Present	X	X
2-Ethylhexyl Nitrate	Present	X		Present		Present	X	Present	X	X
Naphtha (petroleum), heavy aromatic	Present	X		Present		Present	X	Present	X	X
Heavy Aromatic Naptha	Present	X		Present		Present	X	Present	X	X
1,2,4 Trimethylbenzene	Present	X		Present		Present	X	Present	X	X
Naphthalene	Present	X		Present		Present	X	Present	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations**CERCLA**

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Naphthalene 91-20-3	1 lb		RQ 1 lb final RQ RQ 0.454 kg final RQ

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
1,2,4 Trimethylbenzene - 95-63-6	95-63-6	<5	1.0
Naphthalene - 91-20-3	91-20-3	<1	0.1

CWA (Clean Water Act)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Naphthalene	100 lb	X	X	X

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Naphthalene - 91-20-3	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
2-Ethylhexyl Nitrate 27247-96-7	X		
1,2,4 Trimethylbenzene 95-63-6	X	X	X
Chemical Name	New Jersey	Massachusetts	Pennsylvania
1,3,5-Trimethylbenzene 108-67-8		X	
Naphthalene 91-20-3	X	X	X
Propyl benzene 103-65-1	X	X	X

16. OTHER INFORMATION

<u>NFPA</u>	Health - 2	Flammability - 2	Instability - 1
<u>HMIS</u>	Health - 2	Flammability - 2	Physical Hazards - 1

Issue Date:	17-Aug-2015
Revision Date:	02-Sep-2015
Revision Note:	New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

Safety Data Sheet

Issue Date: 17-Aug-2015

Revision Date: 02-Sep-2015

Version 1

1. IDENTIFICATION

Product Identifier

Product Name PURUS Diesel Fuel Additive
1 Gallon

Other means of identification

SDS # PUR-031, PIN4950

Recommended use of the chemical and restrictions on use

Recommended Use Diesel fuel additive.

Details of the supplier of the safety data sheet

Supplier Address

Warren Oil Company
915 E. Jefferson Ave.
West Memphis, AR 72301

Manufactured for:

AIOD
P.O. Box 1861
Montrose, CO 81402-1861
970-249-6336 www.purusproducts.com

Emergency Telephone Number

Company Phone Number 1-800-428-9284
Emergency Telephone (24 hr) CHEMTREC 1-800-424-9300 (North America) 1-703-527-3887 (International)

2. HAZARDS IDENTIFICATION

Physical State Liquid

Classification

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1B
Aspiration toxicity	Category 1

Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed
May be harmful in contact with skin
Causes mild skin irritation

Signal Word

Danger

Hazard Statements

Harmful if inhaled
May cause genetic defects
May cause cancer
May be fatal if swallowed and enters airways

**Precautionary Statements - Prevention**

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 Do not induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Hazards

Toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Light aliphatic solvent naphtha	64742-48-9	60-70
2-Ethylhexyl Nitrate	27247-96-7	10-20
Naphtha (petroleum), heavy aromatic	64742-94-5	1-10
Heavy Aromatic Naptha	64742-95-6	<5
1,2,4 Trimethylbenzene	95-63-6	<5
Naphthalene	91-20-3	<5
1,3,5-Trimethylbenzene	108-67-8	<5
Cumene	98-82-8	<1

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

General Advice	If exposed or concerned: Get medical advice/attention.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Ingestion	Immediately call a poison center or doctor/physician. Do not induce vomiting.
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Most important symptoms and effects

Symptoms	May be harmful if swallowed. May be harmful in contact with skin. Causes mild skin irritation. Harmful if inhaled. May cause genetic defects. May cause cancer. May be fatal if swallowed and enters airways.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Not determined.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Use personal protective equipment as required.
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Methods and material for containment and cleaning up

Methods for Containment	Prevent further leakage or spillage if safe to do so.
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Methods for Clean-Up	Keep in suitable, closed containers for disposal.
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7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling	Handle in accordance with good industrial hygiene and safety practice. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area.
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Conditions for safe storage, including any incompatibilities

Storage Conditions	Store locked up.
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Incompatible Materials	None known based on information supplied.
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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name 1,2,4 Trimethylbenzene 95-63-6	ACGIH TLV -	OSHA PEL -	NIOSH IDLH TWA: 25 ppm TWA: 125 mg/m ³
1,3,5-Trimethylbenzene 108-67-8	-	-	TWA: 25 ppm TWA: 125 mg/m ³
Chemical Name Naphthalene 91-20-3	ACGIH TLV TWA: 10 ppm S*	OSHA PEL TWA: 10 ppm TWA: 50 mg/m ³ (vacated) TWA: 10 ppm (vacated) TWA: 50 mg/m ³ (vacated) STEL: 15 ppm (vacated) STEL: 75 mg/m ³	NIOSH IDLH IDLH: 250 ppm TWA: 10 ppm TWA: 50 mg/m ³ STEL: 15 ppm STEL: 75 mg/m ³
Cumene 98-82-8	TWA: 50 ppm	TWA: 50 ppm TWA: 245 mg/m ³ (vacated) TWA: 50 ppm (vacated) TWA: 245 mg/m ³ (vacated) S*	IDLH: 900 ppm TWA: 50 ppm TWA: 245 mg/m ³

Appropriate engineering controls

Engineering Controls Showers. Eyewash stations. Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Refer to 29 CFR 1910.133 for eye and face protection regulations.

Skin and Body Protection Refer to 29 CFR 1910.138 for appropriate skin and body protection.

Respiratory Protection Refer to 29 CFR 1910.134 for respiratory protection requirements.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Odor	Not determined
Appearance	Not determined	Odor Threshold	Not determined
Color	Not determined		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not determined	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	Not determined	
Flash Point	Not determined	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Not determined	
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Specific Gravity	Not determined	
Water Solubility	Not determined	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not determined	
Decomposition Temperature	Not determined	

Kinematic Viscosity	Not determined
Dynamic Viscosity	Not determined
Explosive Properties	Not determined
Oxidizing Properties	Not determined

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	Avoid contact with eyes.
Skin Contact	May be harmful in contact with skin. Causes mild skin irritation.
Inhalation	Harmful if inhaled.
Ingestion	May be harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Light aliphatic solvent naphtha 64742-48-9	> 5000 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	-
2-Ethylhexyl Nitrate 27247-96-7	> 2000 mg/kg (Rat)	> 4820 mg/kg (Rabbit)	> 14 mg/L (Rat) 4 h
Naphtha (petroleum), heavy aromatic 64742-94-5	> 5000 mg/kg (Rat)	> 2 mL/kg (Rabbit)	> 590 mg/m ³ (Rat) 4 h
Heavy Aromatic Naptha 64742-95-6	= 8400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 3400 ppm (Rat) 4 h
1,2,4 Trimethylbenzene 95-63-6	= 3280 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	= 18 g/m ³ (Rat) 4 h
1,3,5-Trimethylbenzene 108-67-8	= 5000 mg/kg (Rat)	-	= 24 g/m ³ (Rat) 4 h
Naphthalene 91-20-3	= 490 mg/kg (Rat) = 1110 mg/kg (Rat)	(> 20 g/kg (Rabbit) = 1120 mg/kg (Rabbit)	> 340 mg/m ³ (Rat) 1 h
Propyl benzene 103-65-1	= 6040 mg/kg (Rat)	-	= 65000 ppm (Rat) 2 h

Cumene = 1400 mg/kg (Rat) = 12300 µL/kg (Rabbit) > 3577 ppm (Rat) 6 h = 39000
98-82-8 mg/m³ (Rat) 4 h

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Germ cell mutagenicity May cause genetic defects.

Carcinogenicity May cause cancer.

Chemical Name	ACGIH	IARC	NTP	OSHA
2-Ethylhexyl Nitrate 27247-96-7		Group 2A		X
Naphthalene 91-20-3	A3	Group 2A	Reasonably Anticipated	X
Cumene 98-82-8		Group 2B	Reasonably Anticipated	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2A - Probably Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

NTP (National Toxicology Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Aspiration hazard May be fatal if swallowed and enters airways.

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Light aliphatic solvent naphtha 64742-48-9		2200: 96 h Pimephales promelas mg/L LC50		2.6: 96 h Chaetogammarus marinus mg/L LC50
2-Ethylhexyl Nitrate 27247-96-7		116: 48 h Salmo gairdneri mg/L LC50 static		
Naphtha (petroleum), heavy aromatic 64742-94-5	2.5: 72 h Skeletonema costatum mg/L EC50	41: 96 h Pimephales promelas mg/L LC50 1740: 96 h Lepomis macrochirus mg/L LC50 static 45: 96 h Pimephales promelas mg/L LC50 flow-through 19: 96 h Pimephales promelas mg/L LC50 static 2.34: 96 h Oncorhynchus mykiss mg/L LC50		0.95: 48 h Daphnia magna mg/L EC50
Heavy Aromatic Naptha 64742-95-6		9.22: 96 h Oncorhynchus mykiss mg/L LC50		6.14: 48 h Daphnia magna mg/L EC50
1,2,4 Trimethylbenzene 95-63-6		7.19 - 8.28: 96 h Pimephales promelas mg/L LC50 flow- through		6.14: 48 h Daphnia magna mg/L EC50

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
1,3,5-Trimethylbenzene 108-67-8		3.48: 96 h Pimephales promelas mg/L LC50		50: 24 h Daphnia magna mg/L EC50
Naphthalene 91-20-3	0.4: 72 h Skeletonema costatum mg/L EC50	5.74 - 6.44: 96 h Pimephales promelas mg/L LC50 flow-through 1.6: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.91 - 2.82: 96 h Oncorhynchus mykiss mg/L LC50 static 1.99: 96 h Pimephales promelas mg/L LC50 static 31.0265: 96 h Lepomis macrochirus mg/L LC50 static		2.16: 48 h Daphnia magna mg/L LC50 1.96: 48 h Daphnia magna mg/L EC50 Flow through 1.09 - 3.4: 48 h Daphnia magna mg/L EC50 Static
Cumene 98-82-8	2.6: 72 h Pseudokirchneriella subcapitata mg/L EC50	6.04 - 6.61: 96 h Pimephales promelas mg/L LC50 flow-through 4.8: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 2.7: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 5.1: 96 h Poecilia reticulata mg/L LC50 semi-static	EC50 = 0.89 mg/L 5 min EC50 = 1.10 mg/L 15 min EC50 = 1.48 mg/L 30 min EC50 = 172 mg/L 24 h	0.6: 48 h Daphnia magna mg/L EC50 7.9 - 14.1: 48 h Daphnia magna mg/L EC50 Static

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
2-Ethylhexyl Nitrate 27247-96-7	4.14
Naphtha (petroleum), heavy aromatic 64742-94-5	2.9 - 6.1
1,2,4 Trimethylbenzene 95-63-6	3.63
Naphthalene 91-20-3	3.3
Propyl benzene 103-65-1	3.68
Cumene 98-82-8	3.55

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

US EPA Waste Number

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
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Naphthalene 91-20-3	U165	Included in waste streams: F024, F025, F034, F039, K001, K035, K060, K087, K145			U165
Cumene 98-82-8					U055
Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes	
Naphthalene 91-20-3			Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.		

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Naphthalene 91-20-3	Toxic
Cumene 98-82-8	Toxic Ignitable

14. TRANSPORT INFORMATION

Note	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
DOT	Not regulated
IATA	Not regulated
IMDG Marine Pollutant	This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Light aliphatic solvent naphtha	Present	X		Present		Present	X	Present	X	X
2-Ethylhexyl Nitrate	Present	X		Present		Present	X	Present	X	X
Naphtha (petroleum), heavy aromatic	Present	X		Present		Present	X	Present	X	X
Heavy Aromatic Naptha	Present	X		Present		Present	X	Present	X	X
1,2,4 Trimethylbenzene	Present	X		Present		Present	X	Present	X	X
Naphthalene	Present	X		Present		Present	X	Present	X	X
1,3,5-Trimethylbenzene	Present	X		Present		Present	X	Present	X	X
Cumene	Present	X		Present		Present	X	Present	X	X

Legend:

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
- ENCS - Japan Existing and New Chemical Substances*
- IECSC - China Inventory of Existing Chemical Substances*
- KECL - Korean Existing and Evaluated Chemical Substances*
- PICCS - Philippines Inventory of Chemicals and Chemical Substances*
- AICS - Australian Inventory of Chemical Substances*

US Federal Regulations

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Naphthalene 91-20-3	1 lb		RQ 1 lb final RQ
Cumene 98-82-8	5000 lb		RQ 0.454 kg final RQ RQ 5000 lb final RQ RQ 2270 kg final RQ

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
1,2,4 Trimethylbenzene - 95-63-6	95-63-6	<5	1.0
Naphthalene - 91-20-3	91-20-3	<5	0.1
Cumene - 98-82-8	98-82-8	<1	1.0

CWA (Clean Water Act)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Naphthalene	100 lb	X	X	X

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Naphthalene - 91-20-3	Carcinogen
Cumene - 98-82-8	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
2-Ethylhexyl Nitrate 27247-96-7	X		
1,2,4 Trimethylbenzene 95-63-6	X	X	X
1,3,5-Trimethylbenzene 108-67-8		X	
Naphthalene 91-20-3	X	X	X
Propyl benzene 103-65-1	X	X	X
Cumene 98-82-8	X	X	X

16. OTHER INFORMATION**NFPA****Health Hazards**

Not determined

Flammability

Not determined

Instability

Not determined

Special Hazards

Not determined

HMIS**Health Hazards**

Not determined

Flammability

Not determined

Physical Hazards

Not determined

Personal Protection

Not determined

Issue Date: 17-Aug-2015**Revision Date:** 02-Sep-2015**Revision Note:** New format**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

Safety Data Sheet

Issue Date: 17-Aug-2015

Revision Date: 02-Sept-2015

Version 1

1. IDENTIFICATION

Product Identifier

Product Name PURUS Diesel Fuel Treatment

Other means of identification 2.5 GALLON, 55 GALLON, 275 GALLON

SDS # PUR-031A PIN4948, PIN4945, PIN4951

Recommended use of the chemical and restrictions on use

Recommended Use Diesel Fuel Additive.

Details of the supplier of the safety data sheet

Supplier Address

Warren Oil Company, Inc.
2340 U.S. 301 North
Dunn, NC 28335

Manufactured for:

AIOD
P.O. Box 1861
Montrose, CO 81402-1861
970-249-6336 www.purusproducts.com

Emergency Telephone Number

Company Phone Number 1-800-428-9284

Emergency Telephone (24 hr) CHEMTREC 1-800-424-9300 (North America) 1-703-527-3887 (International)

2. HAZARDS IDENTIFICATION

Physical state: Liquid

Classification

Acute toxicity – Inhalation (Dusts/Mists)	Category 4
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1B
Aspiration toxicity	Category 1
Flammable Liquids	Category 3

Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed
May be harmful in contact with skin
Causes mild skin irritation

Signal Word

Danger

Hazard statements

Harmful if inhaled
May cause genetic defects
May cause cancer

May be fatal if swallowed and enters airways
Flammable liquid and vapor



Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Keep away from heat/sparks/open flames/hot surfaces. – No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof equipment
Use only non-sparking tools
Take precautionary measures against static discharge

Precautionary Statements - Responses

IF exposed or concerned: Get medical advice/attention
IF ON SKIN (or hair) Remove/ Take off immediately all contaminated clothing
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
DO NOT induce vomiting
IN CASE OF FIRE: Use CO₂, dry chemical, or foam for extinction.

Precautionary Statements - Storage

Store locked up
Store in well-ventilated place. Keep cool

Precautionary Statements – Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards

Toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
2-Ethylhexyl Nitrate	27247-96-7	40-50
Light aliphatic solvent naphtha	64742-48-9	30-40
Naphtha (petroleum), heavy aromatic	64742-94-5	20-30
Heavy Aromatic Naphtha	64742-95-6	5-10
1,2,4 Trimethylbenzene	95-63-6	5-10
Naphthalene	91-20-3	1-5
1,3,5-Trimethylbenzene	108-67-8	1-5
Cumene	98-82-8	0.1-05.5

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

General Advice:	If exposed or concerned: Get medical advice/attention.
Eye Contact:	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.
Skin contact:	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.
Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.
Ingestion:	Do not induce vomiting. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Immediately call a poison center or doctor/physician.

Most important symptoms/effects

Symptoms:	Harmful if inhaled. May be harmful if swallowed. May be harmful in contact with skin. Causes mild skin irritation.
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Indication of immediate medical attention and special treatment needed

Notes to physician:	Aspiration of material into the lungs due to vomiting can cause chemical pneumonitis which can be fatal.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media: Not determined.

Specific Hazards Arising from the Chemical

Flammable liquid and vapor.

Explosion Data**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Wear protective clothing as described in Section 8 of this safety data sheet.

Environmental precautions

Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment: Prevent further leakage or spillage if safe to do so. Soak up and contain spill with an inert (i.e. vermiculite, dry sand or earth) absorbent material.

Methods for Clean-Up Use non-sparking hand tools and explosion-proof electrical equipment. Place in suitable containers for disposal. For waste disposal, see Section 13 of this safety data sheet.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use spark-proof tools and explosion-proof equipment. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Storage conditions:

Store locked up.

Incompatible Materials:

None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
1,2,4 Trimethylbenzene 95-63-6	-	-	TWA: 25 ppm TWA: 125 mg/m ³
1,3,5-Trimethylbenzene 108-67-8	-	-	TWA: 25 ppm TWA: 125 mg/m ³
Naphthalene 91-20-3	TWA: 10 ppm S*	TWA: 10 ppm TWA: 50 mg/m ³ (vacated) TWA: 10 ppm (vacated) TWA: 50 mg/m ³ (vacated) STEL: 15 ppm (vacated) STEL: 75 mg/m ³	IDLH: 250 ppm TWA: 10 ppm TWA: 50 mg/m ³ STEL: 15 ppm STEL: 75 mg/m ³
Cumene 98-82-8	TWA: 50 ppm	TWA: 10 ppm TWA: 245 mg/m ³ (vacated) TWA: 50 ppm (vacated) TWA: 245 mg/m ³ (vacated) S* S*	IDLH: 900 ppm TWA: 50 ppm TWA: 245 mg/m ³

Appropriate engineering controls

Engineering Controls:

Apply technical measures to comply with the occupational exposure limits. Showers. Eyewash stations. Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection:

Chemical safety goggles/face shield. Refer to 29 CFR 1910.133 for eye and face protection regulations.

Skin and Body Protection:

Wear protective gloves and protective clothing. Refer to 29 CFR 1910.138 for appropriate skin and body protection.

Respiratory Protection:

IF TLV is exceeded, use a NIOSH/MSHA approved respirator. Refer to CFR 1910.134 for respiratory protection requirements.

General Hygiene Considerations:

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Not determined
Appearance	Not determined	Odor Threshold	Not determined
Color	Not determined		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH:	Not determined	
Melting point/Freezing Point:	Not determined	
Boiling point/Boiling range:	Not determined	
Flash point:	Not determined	
Evaporation rate:	Not determined	
Flammability (Solid, Gas):	Not determined	
Flammability Limits in Air:		
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor pressure:	Not determined	
Vapor density:	Not determined	
Relative density:	Not determined	
Water Solubility:	Not determined	
Solubility in other solvents:	Not determined	
Partition Coefficient:	Not determined	
Auto-ignition temperature:	Not determined	
Decomposition temperature:	Not determined	
Kinematic Viscosity:	Not determined	
Dynamic Viscosity:	Not determined	
Explosive Properties:	Not determined	
Oxidizing Properties:	Not determined	

Other information

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Heat, flames and sparks.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product information

Eye Contact:	Avoid contact with eyes.
Skin Contact:	May be harmful in contact with skin. Causes mild skin irritation.
Inhalation:	Harmful if inhaled.
Ingestion:	May be harmful if swallowed.

Component Information

Chemical Name	ATEmix (oral)	ATEmix (dermal)	Inhalation LC50
2-Ethylhexyl Nitrate 27247-96-7	> 2000 mg/kg (Rat)	> 4820 mg/kg (Rabbit)	> 14 mg/L (Rat) 4 h
Light aliphatic solvent naphtha 64742-48-9	> 5000 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	-
Npaphtha (petroleum), heavy aromatic 64742-94-5	> 5000 mg/kg (Rat)	> 2 mL/kg (Rabbit)	> 590 mg/m ³ (Rat) 4 h
Heavy Aromatic Naptha 64742-95-6	= 8400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 3400 ppm (Rat) 4 h
1,2,4 Trimethylbenzene 95-63-6	= 3280 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	> 18 g/m ³ (Rat) 4 h
1,3,5-Trimethylbenzene 108-67-8	= 5000 mg/kg (Rat)	-	> 24 g/m ³ (Rat) 4 h
Naphthalene 91-20-3	= 1110 mg/kg (Rat) = 490 mg/kg (Rat)	> 20 g/kg (Rabbit) = 1120 mg/kg (Rabbit)	> 340 mg/m ³ (Rat) 4 h
Propyl benzene 103-65-1	= 6040 mg/kg (Rat)	-	= 65000 ppm (Rat) 2 h
Cumene 98-82-8	= 1400 mg/kg (Rat)	= 12300 µL/kg (Rabbit)	= 39000 mg/m ³ (Rat) 4 h > 3577 ppm (Rat) 6 h

Information on physical, chemical and toxicological effects

Symptoms: Please see Section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Germ cell mutagenicity: May cause genetic defects.

Carcinogenicity: May cause cancer.

Chemical Name	ACGIH	IARC	NTP	OSHA
2-Ethylhexyl Nitrate 27247-96-7		Group 2A		X
Naphthalene 91-20-3	A3	Group 2B	Reasonably Anticipated	X
Cumene 98-82-8		Group 2B	Reasonably Anticipated	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 – Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2A – Probably Carcinogenic to Humans

Group 2B – Possibly Carcinogenic to Humans

NTP (National Toxicology Program)

Reasonable Anticipated – Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Aspiration hazard: May be fatal if swallowed and enters airways.

Numeric measures of toxicity

The following values are calculated based on Chapter 3.1 of the GHS document

ATEmix (oral): 2,452.00 mg/kg

ATEmix (dermal):	2,689.00 mg/kg
ATEmix (inhalation-dust/mist):	2.00 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Crustacea
2-Ethylhexyl Nitrate 27247-96-7		116: 48 h Salmo gairdneri mg/L LC50 static	
Light aliphatic solvent naphtha 64742-48-9		2200: 96 h Pimephales promelas mg/L LC50	2.6: 96 h Chaetogammarus marinus mg/L LC50
Npaphtha (petroleum), heavy aromatic 64742-94-5	2.5: 72 h Skeletonema costatum mg/L EC50	45: 96 h Pimephales promelas mg/L LC50 flow-through 2.34: 96 h Oncorhynchus mykiss mg/L LC50 19: 96 h Pimephales promelas mg/L LC50 static 1740: 96 h Lepomis macrochirus mg/L LC50 static 41: 96 h Pimephales promelas mg/L LC50	0.95: 48 h Daphnia magna mg/L EC50
Heavy Aromatic Naptha 64742-95-6		9.22: 96 h Oncorhynchus mykiss mg/L LC50	6.14: 48 h Daphnia magna mg/L EC50
1,2,4 Trimethylbenzene 95-63-6		7.19 – 8.28: 96 h Pimephales Promelas mg/L LC50 flow-through	6.14: 48 h Daphnia magna mg/L EC50
1,3,5-Trimethylbenzene 108-67-8		3.48: 96 h Pimephales promelas mg/L LC50	50: 24 h Daphnia magna mg/L EC50
Naphthalene 91-20-3	0.4: 72 h Skeletonema costatum mg/L EC50	31.0265: 96 h Lepomis macrochirus mg/L LC50 static 1.6: 96h Oncorhynchus mykiss mg/L LC50 static 5.74 – 6.44: 96 h Pimephales promelas mg/L LC50 flow-through 1.99: 96 h Pimephales promelas mg/L LC50 static	1.09 – 3.4: 48 h Daphnia magna mg/L EC50 Static 1.96: 48 h Daphnia magna mg/L EC50 Flow through 2.16: 48 h Daphnia magna mg/L LC50
Cumene 98-82-8	2.6: 72 h Pseudokirchneriella subcapitata mg/L EC50	4.8: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 6.04 – 6.61: 96 h Pimephales promelas mg/L LC50 flow-through 2.7: 96 h Oncorhynchus mykiss mg/L/LC50 semi-static 5.1: 96 h Poecilia reticulate mg/L LC50 semi-static	0.6: 48 h Daphnia magna mg/L EC50 7.9 – 14.1: 48 h Daphnia magna mg/L EC50 Static

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
2-Ethylhexyl Nitrate 27247-96-7	4.14
Naphtha (petroleum), heavy aromatic 64742-94-5	6.1
1,2,4 Trimethylbenzene 95-63-6	3.63
Naphthalene 91-20-3	3.3
Propyl benzene 103-65-1	3.68
Cumene 98-82-8	3.55

Other Adverse Effects

Not determined.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

US EPA Waste Number

Chemical Name	RCRA	RCRA – Basis for Listing	RCRA – D Series Wastes	RCRA – U Series Wastes
Naphthalene 91-20-3	U165	Included in waste streams; F024, F025, F034, F039, K001, K035, K060, K087, K145		U165
Cumene 98-28-3				U165

Chemical Name	RCRA – Halogenated Organic Compounds	RCRA – P Series Wastes	RCRA – F Series Wastes	RCRA – K Series Wastes
Naphthalene 91-20-3			Toxic wastes waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Naphthalene 91-20-3	Toxic
Cumene 98-82-8	Toxic Ignitable

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up-to-date shipping information, including exemptions and special circumstances.

DOT

UN/ID No UN1993
 Proper Shipping Name Flammable liquid, n.o.s. (Petroleum distillates, Naphthalene)
 Hazard Class 3
 Packing Group III
 Marine Pollutant Marine pollutant; 2-Ethylhexyl nitrate.

IATA

UN/ID No UN1993
 Proper Shipping Name Flammable liquid, n.o.s. (Petroleum distillates, Naphthalene)
 Hazard Class 3
 Packing Group III
 Marine Pollutant Marine pollutant; 2-Ethylhexyl nitrate.

IMDG

UN/ID No UN1993
 Proper Shipping Name Flammable liquid, n.o.s. (Petroleum distillates, Naphthalene)
 Hazard Class 3
 Packing Group III
 Marine Pollutant Marine pollutant; 2-Ethylhexyl nitrate.

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/DNSL	Complies
EINECS/ELINCS	Complies
ENCS	-
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

- TSCA – United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/DNSL – Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS – European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS – Japan Existing and New Chemical Substances
- IECSC – China Inventory of Existing Chemical Substances
- KECL – Korean Existing and Evaluated Chemical Substances
- PICCS – Philippines Inventory of Chemicals and Chemical Substances
- AICS – Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Naphthalene 91-20-3	100 lb 1 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ RQ 1 lb final RQ RQ 0.454 kg final RQ
Cumene 98-82-8	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Name	CAS No	Weight-%	SARA 313 – Threshold Values %
1,2,4 Trimethylbenzene – 95-63-6	95-636	5-10	1.0
Naphthalene – 91-20-3	91-20-3	1-5	0.1

CWA (Clean Water Act)

Chemical Name	CWA – Reportable Quantities	CWA – Toxic Pollutants	CWA – Priority Pollutants	CWA – Hazardous Substances
Naphthalene	100 lb	X	X	X

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Naphthalene – 91-20-3	Carcinogen
Cumene – 98-82-8	Carcinogen

U.S. States Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
2-Ethylhexyl Nitrate 27247-96-7	X		
1,2,4 Trimethylbenzene 95-63-6	X	X	X
Naphthalene 91-20-3	X	X	X
1,3,5-Trimethylbenzene 108-67-8		X	
Propyl benzene 103-65-1	X	X	X
Cumene 98-82-8	X	X	X

16. OTHER INFORMATION

NFPA	Health Hazards	Flammability	Instability	Special Hazards
	2	3	0	Not determined
HMIS	Health Hazards	Flammability	Physical hazards	Personal Protection
	2	3	0	Not determined

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Revision Note: N/A

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet