

Safety Data Sheet

Issue Date: 01-Sept-2016

Revision Date: N/A

Version 1

1. IDENTIFICATION

Product Identifier

Product Name PURUS ANTI-GEL DIESEL FUEL ADDITIVE with CETANE BOOST & INJECTOR
CLEANER

Other means of identification

SDS # PUR-034 PIN 4955, PIN4953

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. |
| 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
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
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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
Chemical Name	Partition Coefficient
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.	

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 Hazards 2	Flammability 3	Instability 0	Special Hazards Not determined
<u>HMIS</u>	Health Hazards Not determined	Flammability Not determined	Physical Hazards Not determined	Personal Protection Not determined

Issue Date: 01-Sept-2016
Revision Date: N/A
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: 01-Sept-2016

Revision Date: N/A

Version 1

1. IDENTIFICATION

Product Identifier

Product Name

PURUS ANTI-GEL DIESEL FUEL ADDITIVE WITH CETANE BOOST & INJECTOR
CLEANER
One Gallon

Other means of identification

SDS

PUR-034A PIN 4961

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.

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.

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.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Keep in suitable, closed containers for disposal.

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.

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: 50 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 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
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 98-82-8	= 1400 mg/kg (Rat)	= 12300 µL/kg (Rabbit)	> 3577 ppm (Rat) 6 h = 39000 mg/m ³ (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
- 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
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
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 RQ 0.454 kg final RQ
Cumene 98-82-8	5000 lb		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	<51	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	Flammability	Instability	Special Hazards
	2	3	0	Not determined
HMIS	Health Hazards	Flammability	Physical Hazards	Personal Protection
	Not determined	Not determined	Not determined	Not determined

Issue Date: 01-Sept-2016
 Revision Date: N/A
 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: 6-Sept.-2016

Revision Date: N/A

Version 1

1. IDENTIFICATION

Product Identifier

Product Name

PURUS ANTI-GEL DIESEL FUEL ADDITIVE WITH CETANE BOOST & INJECTOR CLEANER

Other means of identification

SDS #

2.5 Gallon, 55 Gallon, 275 Gallon
PUR-034B PIN 4962, PIN4956, PIN4959

Recommended use of the chemical and restrictions on use

Recommended Use

Diesel fuel additive. Winter grade.

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

Emergency Telephone (24 hr)

1-800-428-9284
CHEMTREC 1-800-424-9300 (North America) 1-703-527-3887 (International)

2. HAZARDS IDENTIFICATION

Europe:

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Australia:

HAZARDOUS SUBSTANCE. DANGEROUS GOODS.

Primary hazards and critical effects: Warning.

HARMFUL IF INHALED, ABSORBED THROUGH SKIN OR SWALLOWED.

CAUSES RESPIRATORY TRACT IRRITATION.

ASPIRATION HAZARD IF SWALLOWED.

Contains material which may cause cancer. Risk of cancer depends on duration and level of exposure.

Physical/chemical hazards:

COMBUSTIBLE. – United States and Canada

FLAMMABLE. – European Union

VAPOR MAY CAUSE FLASH FIRE.

When heated above 100°C/212°F may undergo a self-accelerating, exothermic reaction which causes a rapid rise in temperature and pressure. Rupture of storage vessels and fire should be anticipated in case of such temperature.

Environmental hazards:

Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

**Hazardous Material Information
System (U.S.A.)**

Health	2
Fire hazard	2
Reactivity	1

GHS Classification

Hazard classification:

FLAMMABLE LIQUIDS – Category 3
ACUTE TOXICITY (oral) – Category 4
ACUTE TOXICITY (dermal) – Category 4
ACUTE TOXICITY (inhalation) – Category 4
CARCINOGENICITY – Category 2
ASPIRATION HAZARD – Category 1
AQUATIC HAZARD (LONG-TERM) – Category 2

Symbol:



Signal word:

Danger

Hazard statements:

Flammable liquid and vapor.
Harmful if swallowed, in contact with skin or if inhaled.
Suspected of causing cancer.
May be fatal if swallowed and enters airways.
Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, sparks, open flames and hot surfaces. – No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

Response:

Collect spillage. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Take off contaminated clothing and wash it before reuse.

Storage:

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

Disposal:

Dispose of contents and container in accordance with all local, regional, national and international regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Ingredient name</u>	<u>CAS no.</u>	<u>Conc. (% w/w)</u>	<u>EU Classification</u>	<u>WHMIS Regulated</u>
Solvent naphtha (petroleum), light aromatic	64742-95-6	30 - 60	R10 Xn; R65 Xi; R37 R66, R67 N; R51/53	Yes
2-Ethylhexyl nitrate	27247-96-7	20 - 30	R44 Xn; R20/21/22 R66 N; R51/53	Yes
Benzene, 1,2,4-trimethyl-	95-63-6	10 – 19.9	R10 Xn; R20 Xi; R36/37/38 N; R51/53	Yes
Propanol, 1(or2)-(2-methoxymethylethoxy) Solvent naphtha (petroleum), heavy aromatic	34590-94-8 64742-94-5	10 – 19.9 5 – 9.9	Not classified Xn; R65 R66, R67 N; R51/53	No
Benzene, 1,3,5-trimethyl-	108-67-8	5 – 9.9	R10 Xi; R37 N; R51/53	Yes
n-Propylbenzene	103-65-1	1 – 4.9	R10 Xn; R65 Xi; R37 N; R51/53	Yes
Xylene	1330-20-7	1 – 4.9	R10 Xn; R20/21 Xi; R38	Yes
Cumene	98-82-8	1 – 4.9	R10 Xn; R65 Xi; R37 N; R51/53	Yes
Benzene, 1,2,3-trimethyl-	526-73-8	1 – 4.9	R10 Xi; R36/38	Yes
Napthalene	91-20-3	0.5 – 0.99	Carc. Cat. 3; R40 Xn; R22 N; R50/53	Yes

4. FIRST-AID MEASURES

Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Ingestion:	DO NOT induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. If affected person is fully conscious, give one glass of water to drink. Never give anything by mouth to an unconscious person. Get immediate medical attention.
Skin contact:	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately.
Eye contact:	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

5. FIRE-FIGHTING MEASURES

Extinguishing media:	In case of fire, use water spray (fog), foam, dry chemical or CO ₂ .
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Fire-fighting procedures:	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. When heated above 100°C/212°F may undergo a self-accelerating, exothermic reaction which causes a rapid rise in temperature and pressure. Rupture of storage vessels and fire should be anticipated in case of such temperature. Spray storage vessels with water to maintain temperature below 100°C/212°F.
Fire/explosion hazards:	COMBUSTIBLE. – United States and Canada FLAMMABLE. – European Union VAPOR MAY CAUSE FLASH FIRE. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.
Hazardous decomposition products:	Decomposition products may include the following materials: Carbon dioxide Carbon monoxide Nitrogen oxides
Flash point:	Closed cup: 50°C (122°F) [Pensky-Martens. Minimum]

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Immediately contact emergency personnel. Eliminate all ignition sources. Keep unnecessary personnel away. Use suitable protective equipment (Section 8). Follow all fire-fighting procedures (Section 5). Do not touch or walk through spilled material.
Environmental precautions and clean-up methods:	If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion-proof means to transfer material to a sealable, appropriate container for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Avoid contact of spilled material with soil and prevent runoff entering surface waterways.

Note: See Section 1 for emergency contact information and Section 13 for waste disposal.

7. HANDLING AND STORAGE

Handling:	Avoid contact with eyes, skin and clothing. Keep container closed. Use only with adequate ventilation. Avoid breathing vapor or mist. Keep away from heat, sparks and flame. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Wash thoroughly after handling. Product Transfer Do not heat the product. Prior to starting transfer pump, ensure all valves in the product discharge line are open and that the line is unobstructed. Immediately after starting the transfer pump, verify that the product is flowing. If product is not flowing, shut the pump off immediately. Operating the transfer pump in a dead-headed (blocked) condition without product flow can result in an explosion damaging equipment and causing personal injury. A pneumatic driven diaphragm pump or pumps of other designs equipped with high temperature (75 degs. C) shut-off devices are recommended and when pumps are provided at fixed locations.
Storage:	Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Do not heat the product. Warehouses equipped with fire suppression systems are recommended. This product should not be stored in the same area with tanks containing flammable liquids. Fire suppression systems should be adequate to keep product cool in the event of a fire.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Personal protective equipment

Respiratory system: Use appropriate respiratory protection if there is the potential to exceed the exposure limit(s). (Approved/certified respirator with organic vapor cartridge.)

Skin and body: When contact is likely, wear chemical resistant gloves, a chemical resistant suit, and boots. Additional body garments should be used based upon the task being performed.

Hands: Hand Protection: Wear chemical resistant gloves. Nitrile gloves of minimum thickness 0.4 mm have an expected breakthrough time of 30 minutes or less when in frequent contact with the product. Due to variable exposure conditions the user must consider that the practical use of a chemical-protective glove in practice may be much shorter than the permeation time above. Manufacturer's directions for use, especially about the minimum thickness and the minimum breakthrough time, must be observed. This information does not replace suitability tests by the end user since glove protection varies depending on the conditions under which the product is used.

Eyes: Safety goggles are considered minimum protection. Goggles with a face shield may be necessary depending on quantity of material and conditions of use.

Occupational exposure limits

<u>Ingredient name</u>	<u>OEL United States</u>	<u>OEL Canada</u>	<u>OEL Europe</u>	<u>OEL Australia</u>
1) 2-Ethylhexyl nitrate	Afton (United States). TWA: 1 ppm 8 hours.	Afton (Canada). TWA: 1 ppm 8 hours.	Afton (Europe). TWA: 1 ppm 8 hours.	Afton (Australia). TWA: 1 ppm 8 hours.
2) Benzene, 1,2,4-trimethyl-	ACGIH (United States, 1999). TWA: 25 ppm	(Canada). TWA: 25 ppm	EH40 (UK)(Europe). TWA: 25 ppm	ACGIH (United States, 1999). TWA: 25 ppm
3) Propanol, 1(or 2)-(2-methoxymethylethoxy)	ACGIH TLV (United States). Absorbed through skin. TWA: 100 ppm 8 hours. STEL: 150 ppm 15 minutes. OSHA PEL Z2 (United States). Absorbed through skin. TWA: 100 ppm 8 hours. STEL: 150 ppm 15 minutes.	ACGIH TLV (United States). Absorbed through skin. TWA: 100 ppm 8 hours. STEL: 150 ppm 15 minutes.	EH40 (UK)(Europe, 2002). Absorbed through skin. TWA: 50 ppm 8 hours.	ACGIH TLV (United States). Absorbed through skin. TWA: 100 ppm 8 hours. STEL: 150 ppm 15 minutes.
4) Solvent naphtha (petroleum), heavy aromatic	OSHA (United States). TWA: 500 ppm 8 hours. TWA: 2000 mg/m ³ 8 hours.	OSHA (United States). TWA: 500 ppm 8 hours. TWA: 2000 mg/m ³ 8 hours.	OSHA (United States). TWA: 500 ppm 8 hours. TWA: 2000 mg/m ³ 8 hours.	OSHA (United States). TWA: 500 ppm 8 hours. TWA: 2000 mg/m ³ 8 hours.
5) Benzene, 1,3,5-trimethyl-	ACGIH (United States, 1999). TWA: 25 ppm	(Canada). TWA: 25 ppm	EH40 (UK)(Europe). TWA: 25 ppm	ACGIH (United States, 1999). TWA: 25 ppm
6) Xylene	ACGIH (United States). TWA: 100 ppm STEL: 150 ppm OSHA (United States). TWA: 100 ppm	(Canada). TWA: 100 STEL: 150	EH40 (UK)(Europe, 2002). Absorbed through skin. TWA: 50 ppm 8 hours. STEL: 100 ppm 15 minutes.	NOHSC (Australia, 2003). STEL: 80 ppm 15 minutes.

7) Cumene	ACGIH (United States, 1994). Absorbed through skin. TWA: 50 ppm OSHA (United States, 1989). Absorbed through skin. TWA: 50 ppm	(Canada). Absorbed through skin. TWA: 50 ppm	EH40 (UK)(Europe). Absorbed through skin. TWA: 25 ppm 8 hours. EH40 (UK)(Europe, 2002). Absorbed through skin. TWA: 125 mg/m ³ 8 hours. STEL: 250 mg/m ³ 15 minutes.	NOHSC (Australia, 2003). Absorbed through skin. TWA: 25 ppm 8 hours. STEL: 75 ppm 15 minutes.
8) Benzene, 1,2,3-trimethyl-	ACGIH (United States, 1999). TWA: 25 ppm	(Canada). TWA: 25 ppm	ACGIH (United States, 1999). TWA: 25 ppm (Canada). TWA: 25 ppm	ACGIH (United States, 1999). TWA: 25 ppm
9) Naphthalene	ACGIH TLV (United States). Absorbed through skin. TWA: 10 ppm STEL: 15 ppm OSHA PEL (United States). TWA: 10 ppm	ACGIH TLV (United States). Absorbed through skin. TWA: 10 ppm STEL: 15 ppm	EU OEL (Europe). TWA: 10 ppm 8 hours. TWA: 50 mg/m ³ 8 hours. Form: EH40/2005	ACGIH TLV (United States). Absorbed through skin. TWA: 10 ppm STEL: 15 ppm
10) Ethylbenzene	ACGIH (United States, 2012). TWA: 10 ppm ACGIH (United States, 1994). STEL: 125 ppm OSHA (United States, 1989). TWA: 100 ppm	(Canada). TWA: 100 ppm STEL: 125 PPM	EH40 (UK)(Europe, 2002). Absorbed through skin. TWA: 100 ppm 8 hours. STEL: 125 ppm 15 minutes	NOHSC (Australia, 2003). TWA: 100 ppm 8 hours. STEL: 125 ppm 15 minutes.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state and Appearance:	Liquid
Specific gravity:	0.9242 @ 15.6/15.6°C
Viscosity:	5.5 cSt at 40°C
Auto-ignition temperature:	Not determined.
Flash point:	Closed cup: 50°C (122°F) [Pensky-Martens. Minimum]

10. STABILITY AND REACTIVITY

Stability:	Unstable at temperatures greater than 100°C/212°F
Materials to avoid:	Strong oxidizing and reducing agents.
Conditions to avoid:	High temperatures, sparks, and open flames.

11. TOXICOLOGICAL INFORMATION

Routes of entry:	Skin, Eyes, Ingestion, and Inhalation.
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Target organs: Contains material which may cause damage to the following organs: blood, kidneys, lungs, liver, heart, spleen, gastrointestinal tract, cardiovascular system, upper respiratory tract, central nervous system (CNS).

Acute effects

Inhalation: Harmful if inhaled. Irritating to respiratory system.

Ingestion: Harmful if swallowed. Harmful: may cause lung damage if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage.

Ingestion may cause gastrointestinal irritation and diarrhea.

Skin contact: Harmful if absorbed through the skin. Non-irritating to the skin.

Eye contact: Non-irritating to the eyes.

Adverse effects:

- Adverse symptoms may include the following: In the presence of slight material toxicity, fetotoxic effects have been observed in the offspring of rats exposed by inhalation to Solvent Naphtha (petroleum) light aromatic.
- Adverse symptoms may include the following: Overexposure to organic nitrates by inhalation of vapor or skin contact may cause headache, dizziness, nausea, and decreased blood pressure.
- Adverse symptoms may include the following: This product contains trimethylbenzene. Literature data indicate that long-term inhalation exposure causes blood effects in laboratory animals.
- Adverse symptoms may include the following: Symptoms of over-exposure to vapors include drowsiness, weakness, headache, dizziness, and nausea.
- Adverse symptoms may include the following: Central nervous system, liver, kidneys, and blood effects by inhalation and heart beat irregularity (arrhythmia) and heart beat – increase. High exposures to Xylene in some animal studies, often at levels toxic to the mother, affected embryo/fetal development. The significance of this finding to humans is not known. Xylene vapor has caused occupational skin sensitization in humans. When exposed to 1800 ppm Xylene vapor, rats experienced hearing deficits to mid-frequency range tones.

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA	EU
Xylene	A4	-	-	-	-	-	-
Naphthalene	-	2B	-	-	Reasonably anticipated to be a human carcinogen.	-	Limited evidence of a carcinogenic effect.
Ethylbenzene	A3	2B	-	-	-	-	-

Toxicity data

Product/ingredient name	Result	Species	Dose	Exposure
Solvent naphtha (petroleum), light aromatic	LD50 Oral	Rat	8400 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
	LD50 Oral	Rat	2900 mg/kg	-
2-Ethylhexyl nitrate	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>10000 mg/kg	-
Benzene, 1,2,4-trimethyl-	LD50 Dermal	Rabbit	3160 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
	LD50 Oral	Rat	3400 to 6000 mg/kg	-
Propanol, 1(or2)-(2-methoxymethylethoxy)	LC50 Inhalation Vapor	Rat	18000 mg/m ³	4 hours
	LD50 Dermal	Rabbit	9500 mg/kg	-
	LD50 Oral	Rat	5135 mg/kg	-
Solvent naphtha (petroleum), heavy aromatic	LC50 Inhalation Gas	Rat	>275 ppm	7 hours
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>2500 mg/kg	-
Benzene, 1,3,5-trimethyl-	LC50 Inhalation Vapor	Rat	11.67 mg/m ³	6 hours
	LD50 Oral	Rat	>5000 mg/kg	-
	LC50 Inhalation Vapor	Rat	24000 mg/m ³	4 hours
n-Propylbenzene	LD50 Oral	Rat	6040 mg/kg	-

Xylene	LD50 Dermal	Rabbit	>14100 mg/kg	-
	LD50 Oral	Rat	4300 mg/kg	-
	LD50 Oral	Rat – Male	3523 mg/kg	-
	LC50 Inhalation Vapor	Rat	500 to 8500 ppm	4 hours
Cumene	LD50 Dermal	Rabbit	10578 mg/kg	-
	LD50 Oral	Mouse	12750 mg/kg	-
	LD50 Oral	Rat	1400 mg/kg	-
	LC50 Inhalation Vapor	Rat	8000 ppm	4 hours
Long chain alkenyl heterocycle	LD50 Oral	Rat	14000 mg/kg	-

12. ECOLOGICAL INFORMATION







Environmental hazards: Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment. Based on calculation.

Environmental fate: This product contains components which may be persistent in the environment.

13. DISPOSAL CONSIDERATIONS

Waste handling and disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. TRANSPORT INFORMATION

Regulatory information	UN number	Proper shipping name	Class	Packing Group	Label	Additional Information
DOT Classification	NA1993	Combustible liquids, n.o.s. (Xylene, Petroleum distillates) Marine pollutant (2-ethylhexyl nitrate)	Combustible liquid.	III		- Marine pollutant
TDG Classification	UN1993	Flammable liquid, n.o.s. (Xylene, Petroleum distillates) Marine Pollutant (2-ethylhexyl nitrate)	3	III		-
ADR/RID Class	UN1993	Flammable liquid, n.o.s. (Xylene, Petroleum distillates)	3	III		Hazard identification number 30 Special provisions 640 (E) Tunnel code (D/E)
IMDG Class	UN1993	Flammable liquid, n.o.s. (Xylene, Petroleum distillates) Marine pollutant (2-ethylhexyl nitrate)	3	III		-Marine pollutant
IATA-DGR Class	UN1993	Flammable liquid, n.o.s. (Xylene, Petroleum distillates)	3	III		-
ADG Class	UN1993	Flammable liquid, n.o.s. (Xylene, Petroleum distillates)	3	III		-

Notice to reader

The above transport information is provided to assist in the proper classification of this product and may not be suitable for all shipping conditions.

15. REGULATORY INFORMATION

EU regulations

Hazard symbol(s):



Harmful, Dangerous for the environment

Risk phrases:

R10- Flammable
R20/21/22- Harmful by inhalation, in contact with skin and if swallowed.
R37- Irritating to respiratory system.
R40- Limited evidence of a carcinogen effect.
R44- Risk of explosion if heated under confinement.
R65- Harmful: may cause lung damage if swallowed.
R66- Repeated exposure may cause skin dryness or cracking.
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

S15- Keep away from heat.
S16- Keep away from sources of ignition – NO smoking.
S23- Do not breathe vapor.
S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.
S46- If swallowed, seek medical advice immediately and show this container or label.
S62- If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.
S57- Use appropriate containment to avoid environmental contamination.

US regulations

SARA 313 toxic chemical notification and release reporting (w/w%):

Benzene, 1,2,4-trimethyl-	10 – 19.9
Xylene	1 – 4.9
Cumene	1 – 4.9
Naphthalene	0.5 – 0.99
Ethylbenzene	0.1 – 0.5
Benzo[a]pyrene	0 – 0.0001

SARA 311/312 Hazardous Categorization:

SARA 311/312 Hazards identification: Fire hazard. Immediate (acute) health hazard. Delayed (chronic) health hazard.

RQ (Reportable quantity):

CERCLA: Hazardous substances: Xylene: 100 lbs. (45.4 kg); Naphthalene: 100 lbs. (45.4 kg); Benzene : 10 lbs. (4.54 kg); Toluene: 1000 lbs. (454 kg); Benzo[a]pyrene: 1 lb. (0.454 kg); Ethylbenzene: 1000 lbs. (454 kg); Cumene: 5000 lbs. (2270 kg); Styrene: 1000 lbs. (454 kg); p-Xylene: 100 lbs. (45.4 kg); NITRIC ACID: 1000 lbs. (454 kg); VINYL ACETATE: 5000 lbs. (2270 kg);

State – California Prop. 65:

This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute:
Cumene
Naphthalene
Ethylbenzene
Toluene
Benzene
Benzo[a]pyrene

EPA Significant New Use Rule (SNUR): This product contains a substance that has been issued a non-5(e) Significant New Use Rule (SNUR). Please contact company for details.

Canadian regulations

WHMIS (Classification): Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).
Class D-2A: Material causing other toxic effects (Very toxic).
Class D-2B: Material causing other toxic effects (Toxic).
Class F: Dangerously reactive material.

Canada Significant New Activity Notice: This product contains a substance that is the subject of a Significant New Activity (SNAc) notice under CEPA.

International Inventory Status

United States Inventory (TSCA 8b): All components are listed or exempted.

Canada inventory: At least one component is not listed.

Europe inventory: All components are listed or exempted.

Japan inventory (ENCS): At least one component is not listed.

Australia inventory (AICS): At least one component is not listed.

Korea (inventory (KECI): At least one component is not listed.

China inventory (IECSC): At least one component is not listed.

Philippines Inventory (PICCS): At least one component is not listed.

New Zealand Inventory of Chemicals (NZIoC): Not determined.

16. OTHER INFORMATION

Issue Date: 18-Aug-2015
Revision Date: 01-Sept-2016
Revision Note: New format

Full text of R-phrases appearing in Section 3: R10-Flammable.
R44- Risk of explosion if heated under confinement.
R40- Limited evidence of a carcinogenic effect.
R20- Harmful by inhalation.
R22- Harmful if swallowed.
R20/21- Harmful by inhalation and in contact with skin.
R20/21/22- Harmful by inhalation, in contact with skin and if swallowed.
R65- Harmful; may cause lung damage if swallowed.

**Full text of R-phrases appearing in
Section 3:**

R37- Irritating to respiratory system.
R38- Irritating to skin.
R36/38- Irritating to eyes and skin.
R37/38 – Irritating to respiratory system and skin.
R36/37/38- Irritating to eyes, respiratory system and skin.
R66- Repeated exposure may cause skin dryness or cracking.
R67- Vapors may cause drowsiness and dizziness.
R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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