Safety Data Sheet

Issue Date: 26-Jun-2014

Revision Date: 07-Jan-2016

Version 1

1. IDENTIFICATION

Product Identifier Product Name

ProTecta Diesel Fuel Conditioner

Other means of identification SDS #

Recommended use of the chemical and restrictions on useRecommended UseFuel Conditioner.

SFR-005

Details of the supplier of the safety data sheet

Supplier Address SFR Corporation P.O. Box 457 Whitehall, MT 59759

Emergency Telephone Number Company Phone Number

 Company Phone Number
 Phone: 406-287-7836

 Fax: 406-287-7946
 Fax: 406-287-7946

 Emergency Telephone (24 hr)
 INFOTRAC 1-352-323-3500 (International)

 1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Brown liquid

Physical State Liquid

Classification

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Gases)	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1B
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Flammable Liquids	Category 3

Signal Word Danger

Daliyei

Hazard Statements

Harmful if swallowed Harmful in contact with skin Harmful if inhaled Causes skin irritation Causes serious eye irritation May cause genetic defects May cause cancer May cause damage to organs through prolonged or repeated exposure 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 Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Use only outdoors or in a well-ventilated area Wear eye/face protection Do not breathe dust/fume/gas/mist/vapors/spray 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 - Response

If exposed or concerned: Get medical advice/attention IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower If skin irritation occurs: Get medical advice/attention Wash contaminated clothing before reuse IF INHALED: 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 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician Do not induce vomiting Rinse mouth IN CASE OF FIRE: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up Store in a 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	30-60
Heavy Aromatic Naptha	64742-95-6	10-30
Glycol Ether EB	111-76-2	10-30
Ethylbenzene	100-41-4	1-5
Isopropylbenzene	98-82-8	1-5
Xylene	1330-20-7	<2
Aromatic petroleum hydrocarbons	25551-13-7	<2

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	Provide this SDS to medical personnel for treatment.		
Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.		
Skin Contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.		
Inhalation	IF INHALED: 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	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do not induce vomiting.		
Most important symptoms an	<u>id effects</u>		
Symptoms	Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled. Causes skin irritation Causes serious eye irritation. May cause damage to organs through prolonged or repeated exposure. May be fatal if swallowed and enters airways.		
Indication of any immediate r	nedical attention and special treatment needed		
Notes to Physician	Treat symptomatically.		

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Carbon dioxide (CO2). Dry chemical. Foam.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Use water spray to keep fire-exposed containers cool. Toxic fumes, gases or vapors may evolve on burning. Vapors may be Heavier than air and may travel along the ground to a distant ignition Source and flash back. Container may rupture on heating. Toxic nitrogen oxides may evolve when burning. The alkyl nitrate contained in this Product may decompose exothermically if heated above 120°C. Studies In the Koenen Tube Test indicate that the reaction is non-explosive even When the alkyl nitrate is present at levels up to 70%.

Hazardous Combustion Products Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion. Under combustion conditions, oxides of the following elements will be formed: nitrogen.

Sensitivity to Static Discharge Take precautionary measures against static discharge.

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. Evacuate personnel to safe areas. Remove all sources of ignition. Ventilate affected area.
- **Environmental Precautions** 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.		
Methods for Clean-Up	Pick up free liquid for Recycle and/or disposal. Residual liquid can be absorbed on inert Material. Use non-sparking tools. Check under Transportation and Labeling (DOT/CERCLA) and Other Regulatory Information Section (SARA) for hazardous substances to determine regulatory reporting.		

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. Wash face, hands, and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear eye/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. 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 discharges.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up. Store away from sources of ignition. Protect from extreme temperatures.
Incompatible Materials	Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethylbenzene 100-41-4	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 435 mg/m ³ (vacated) STEL: 125 ppm	IDLH: 800 ppm TWA: 100 ppm TWA: 435 mg/m ³ STEL: 125 ppm STEL: 545 mg/m ³
		(vacated) STEL: 545 mg/m ³	

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Isopropylbenzene 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
		S*	
Xylene 1330-20-7	STEL: 150 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 435 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 435 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 655 mg/m ³	-
Aromatic petroleum hydrocarbons 25551-13-7	TWA: 25 ppm	(vacated) TWA: 25 ppm (vacated) TWA: 125 mg/m ³	-
1,2,4 Trimethylbenzene 95-63-6	-	-	TWA: 25 ppm TWA: 125 mg/m ³

Appropriate engineering controls

Engineering Controls Showers. Eyewash stations. Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Safety glasses. Use chemical safety goggles and/or full-face shield where splashing is possible.
Skin and Body Protection	Nitrile gloves. Suitable protective clothing.
Respiratory Protection	Use NIOSH/MSHA approved full face respirator with a combination organic vapor and high efficiency filter cartridge if the recommended exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites.

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 Appearance Color	Liquid Brown liquid Brown	Odor Odor Threshold	Not determined Not determined
Property pH Melting Point/Freezing Point Boiling Point/Boiling Range Flash Point Evaporation Rate Flammability (Solid, Gas) Upper Flammability Limits Lower Flammability Limits Lower Flammability Limit Vapor Pressure Vapor Density Specific Gravity Water Solubility Solubility in other solvents Partition Coefficient Auto-ignition Temperature Decomposition Temperature Kinematic Viscosity Dynamic Viscosity	ValuesNot determinedNot determined152 °C / 305.6 °F45 °C / 113 °FNot determinedLiquid- Not ApplicableNot determinedNot determined	<u>Remarks • Method</u>	

Explosive Properties Oxidizing Properties

Not determined 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

Strong oxidizing agents.

Hazardous Decomposition Products

Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion. Under combustion conditions, oxides of the following elements will be formed: nitrogen.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	
Eye Contact	Causes serious eye irritation.
Skin Contact	Causes skin irritation. Harmful in contact with skin.
Inhalation	Harmful if inhaled.
Ingestion	Harmful if swallowed. May be fatal if swallowed and enters airways.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
2-Ethylhexyl Nitrate	> 2000 mg/kg (Rat)	> 4820 mg/kg (Rabbit)	> 14 mg/L (Rat)4 h
27247-96-7			
Heavy Aromatic Naptha	= 8400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 3400 ppm (Rat) 4 h
64742-95-6			
Ethylbenzene	= 3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 17.2 mg/L (Rat)4 h
100-41-4	· ·		
Isopropylbenzene	= 1400 mg/kg (Rat)	= 12300 µL/kg (Rabbit)	> 3577 ppm (Rat) 6 h = 39000
98-82-8			mg/m³(Rat)4 h
Xylene	= 3500 mg/kg (Rat)	> 4350 mg/kg (Rabbit) > 1700	= 29.08 mg/L (Rat) 4 h = 5000
1330-20-7		mg/kg (Rabbit)	ppm (Rat)4 h
Aromatic petroleum hydrocarbons	= 8970 mg/kg (Rat)	-	-
25551-13-7			
1,2,4 Trimethylbenzene	= 3280 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	= 18 g/m³ (Rat)4 h
95-63-6		, ,	_ 、 ,

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

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested.

Chemical Name	ACGIH	IARC	NTP	OSHA
2-Ethylhexyl Nitrate 27247-96-7		Group 2A		Х
Ethylbenzene 100-41-4	A3	Group 2B		Х
Isopropylbenzene 98-82-8		Group 2B	Reasonably Anticipated	Х
Xylene 1330-20-7		Group 3		

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

 Group 3 IARC components are "not classifiable as human carcinogens"

 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

 STOT - repeated exposure

 May cause damage to organs through prolonged or repeated exposure.

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	Crustacea
			microorganisms	
2-Ethylhexyl Nitrate		116: 48 h Salmo gairdneri		
27247-96-7		mg/L LC50 static		
Heavy Aromatic Naptha		9.22: 96 h Oncorhynchus		6.14: 48 h Daphnia magna
64742-95-6		mykiss mg/L LC50		mg/L EC50
Ethylbenzene	4.6: 72 h Pseudokirchneriella	11.0 - 18.0: 96 h	EC50 = 9.68 mg/L 30 min	1.8 - 2.4: 48 h Daphnia
100-41-4	subcapitata mg/L EC50 1.7 -	Oncorhynchus mykiss mg/L	EC50 = 96 mg/L 24 h	magna mg/L EC50
	7.6: 96 h Pseudokirchneriella	LC50 static 4.2: 96 h		
	subcapitata mg/L EC50	Oncorhynchus mykiss mg/L		
	static 438: 96 h	LC50 semi-static 9.6: 96 h		
	Pseudokirchneriella	Poecilia reticulata mg/L		
	subcapitata mg/L EC50 2.6 -	LC50 static 32: 96 h Lepomis		
	11.3: 72 h	macrochirus mg/L LC50		
	Pseudokirchneriella	static 9.1 - 15.6: 96 h		
	subcapitata mg/L EC50	Pimephales promelas mg/L		
	static	LC50 static 7.55 - 11: 96 h		
		Pimephales promelas mg/L		
		LC50 flow-through		
Isopropylbenzene	2.6: 72 h Pseudokirchneriella	6.04 - 6.61: 96 h Pimephales		0.6: 48 h Daphnia magna
98-82-8	subcapitata mg/L EC50	promelas mg/L LC50 flow-		mg/L EC50 7.9 - 14.1: 48 h
		through 4.8: 96 h		Daphnia magna mg/L EC50
		Oncorhynchus mykiss mg/L		Static
		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		

Xylene	13.4:96 h Pimenhales	EC50 = 0.0084 mg/l 24 h	3.82.48 h water flea mg/l
1330-20-7	prometas mg/L L C50 flow-	2000 = 0.0004 mg/2 24 m	EC50.0.6: 48 h Gammarus
1550 20 7	through 2 661 - 4 093: 96 h		lacustris mg/L L C50
	Opcorbypchus mykies mg/l		lacustins mg/E ECS0
	CE0 statio 20.26 40.75:06		
	LC50 Static 30.20 - 40.75. 90		
	n Poecilla reticulata mg/L		
	LC50 static 23.53 - 29.97: 96		
	h Pimephales promelas mg/L		
	LC50 static 780: 96 h		
	Cyprinus carpio mg/L LC50		
	780: 96 h Cyprinus carpio		
	mg/L LC50 semi-static 7.711		
	- 9.591: 96 h Lepomis		
	macrochirus mg/L LC50		
	static 19: 96 h Lepomis		
	macrochirus mg/L LC50 13.5		
	- 17.3: 96 h Oncorhynchus		
	mykiss mg/L C50 13.1 -		
	16.5:96 h Lepomis		
	macrochirus mg/L L C50		
	flow-through		
Aromatic petroleum	7 72: 96 h Pimenhales		
bydrocarbons	prometas mg/L L C50 flow-		
25551 12 7	through		
25551-15-7			0.4.4.40 h Danhais man
1,2,4 I rimethyidenzene	7.19 - 6.28: 96 n Pimephales		o. 14. 48 n Daphnia magna
95-63-6	promeias mg/L LC50 flow-		mg/L EC50
	through		1

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

<u>Mobility</u>

Chemical Name	Partition Coefficient
2-Ethylhexyl Nitrate 27247-96-7	4.14
Glycol Ether EB 111-76-2	0.81
Ethylbenzene 100-41-4	3.118
Isopropylbenzene 98-82-8	3.55
Xylene 1330-20-7	2.77 - 3.15
1,2,4 Trimethylbenzene 95-63-6	3.63

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
Ethylbenzene 100-41-4		Included in waste stream: F039		
Isopropylbenzene				U055
98-82-8				
Xylene		Included in waste stream:		U239
1330-20-7		F039		

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Ethylbenzene	Toxic
100-41-4	Ignitable
Isopropylbenzene	Toxic
98-82-8	Ignitable
Xylene	Toxic
1330-20-7	Ignitable

14. TRANSPORT INFORMATION

<u>Note</u>	According to 49 CFR §173.150(f)(1), this material should be reclassified as "NA1993, Combustible Liquid, N.O.S." if it is shipped in bulk.
DOT	Not regulated (If shipped in NON BULK packaging by ground transport)
<u>IATA</u> UN/ID No Proper Shipping Name Hazard Class Packing Group	UN1993 Flammable Liquids, N.O.S (Xylene, Propylene Glycol Ether) 3 III
<u>IMDG</u> UN/ID No Proper Shipping Name Hazard Class Packing Group Marine Pollutant	UN1993 Flammable Liquids, N.O.S (Xylene, Propylene Glycol Ether) 3 III 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
2-Ethylhexyl Nitrate	Present	Х		Present		Present	Х	Present	Х	Х
Heavy Aromatic Naptha	Present	Х		Present		Present	Х	Present	Х	Х
Ethylbenzene	Present	Х		Present		Present	Х	Present	Х	Х
Isopropylbenzene	Present	Х		Present		Present	Х	Present	Х	Х
Xylene	Present	Х		Present		Present	Х	Present	Х	Х
Aromatic petroleum hydrocarbons	Present	Х		Present		Present	Х	Present	Х	Х

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

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Ethylbenzene	1000 lb		RQ 1000 lb final RQ
100-41-4			RQ 454 kg final RQ
Isopropylbenzene	5000 lb		RQ 5000 lb final RQ
98-82-8			RQ 2270 kg final RQ
Xylene	100 lb		RQ 100 lb final RQ
1330-20-7			RQ 45.4 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 %
Ethylbenzene - 100-41-4	100-41-4	1-5	0.1
Isopropylbenzene - 98-82-8	98-82-8	1-5	1.0
Xylene - 1330-20-7	1330-20-7	<2	1.0

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Ethylbenzene	1000 lb	Х	Х	Х
Xylene	100 lb			Х

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65		
Ethylbenzene - 100-41-4	Carcinogen		
Isopropylbenzene - 98-82-8	Carcinogen		

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
2-Ethylhexyl Nitrate	Х		
27247-90-7	N N	X	N N
Ethylbenzene 100-41-4	X	X	Х
Isopropylbenzene 98-82-8	Х	Х	Х
Xylene 1330-20-7	Х	Х	Х
Aromatic petroleum hydrocarbons 25551-13-7	Х	Х	Х
1,2,4 Trimethylbenzene 95-63-6	Х	Х	Х

16. OTHER INFORMATION

<u>NFPA</u> HMIS	Health Hazards 2 Health Hazards 2	Flammability 2 Flammability 1	Instability 1 Physical Hazards 1	Special Hazards Not determined Personal Protection Not determined
Issue Date: Revision Date:	26-Jun-2014 07-Jan-2016			
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