SAFETY DATA SHEET













Revision Date 25-Apr-2016 Version 3.01

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name Diesel Guard Supreme Plus High Performance

Product code DFMSBK

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Diesel fuel additive
Restrictions on use No information available

1.3 Details of the supplier of the safety data sheet

Supplier ValvTect Petroleum Products

A Division of Kop-Coat, Inc. 1608 Barclay Boulevard Buffalo Grove, IL 60089

(847) 272-2278

E-mail Address ValvTect@valvtect.com

1.4 Emergency telephone number

Emergency telephone number Chemtrec: +1 703-527-3887 ex-USA

Chemtrec: 1-800-424-9300 USA

2. Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 3 - (H335)
Aspiration toxicity	Category 1
Flammable liquids	Category 3

2.2 Label elements

Signal Word

Danger

Hazard Statements

Causes skin irritation

Causes serious eye irritation

Causes serious eye irritation Suspected of causing cancer May cause respiratory irritation 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 Wear protective gloves/protective clothing/eye protection/face protection

Wash face, hands and any exposed skin thoroughly after handling

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 electrical/ventilating/lighting/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

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 skin irritation occurs: Get medical advice/attention

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

Wash contaminated clothing before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing

IF SWALLOWED: Immediately call a POISON CENTER or doctor

Do NOT induce vomiting

In case of fire: Use CO2, dry chemical, or foam to extinguish

Precautionary Statements - Storage

Store locked up

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

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

2.3. Other Hazards Hazards not otherwise classified (HNOC)

Not Applicable

2.4 Other information

Not Applicable

Unknown Acute Toxicity

< 1% of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/Information on Ingredients

Substance
Not applicable
Mixture

Chemical Name	CAS-No	Weight %
Solvent naphtha (petroleum), light aromatic	64742-95-6	40 - 50
1,2,4-Trimethylbenzene	95-63-6	20 - 30
2-Ethylhexyl nitrate	27247-96-7	10 - 20
Heavy aromatic naphtha	64742-94-5	5 - 10
Ethylene glycol monobutyl ether	111-76-2	5 - 10
Xylene	1330-20-7	1 - 5
Naphthalene	91-20-3	< 1
CUMENE	98-82-8	< 1

The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First aid measures

4.1 Description of first-aid measures

General advice For further assistance, contact your local Poison Control Center.

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and

continue flushing for at least 15 minutes. Call a physician or poison control center

immediately.

Skin contactWash off immediately with soap and plenty of water for at least 15 minutes while removing

all contaminated clothing and shoes. Call a physician if irritation develops or persists. Wash

contaminated clothing before reuse.

Inhalation Move victim to fresh air. If not breathing, give artificial respiration. Seek immediate medical

attention/advice.

Ingestion Gently wipe or rinse the inside of the mouth with water. Never give fluids if the victim is

unconscious or having convulsions. Do NOT induce vomiting. If a person vomits when lying on his back, place him in the recovery position. Call a physician or poison control center

immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms See Section 2.2, Label Elements and/or Section 11, Toxicological effects.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physicianThere is no specific antidote for effects from overexposure to this material. Treat

symptomatically.

5. Fire-Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media

Foam. Carbon dioxide (CO₂). Dry chemical. Water may be used to cool and prevent the rupture of containers that are exposed to the heat from a fire. Water spray or fog.

Unsuitable Extinguishing Media Water may be unsuitable for extinguishing fires.

5.2 Special hazards arising from the substance or mixture

Special Hazard

Thermal decomposition can lead to release of irritating gases and vapors Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks) Temperatures above 100°C may cause self-accelerating exothermic reaction which causes a rapid rise in temperature and pressure. This could result in an explosion (bursting of the container), splashing of material, burning of the product, and the emission of toxic gases and exhaust fumes.

Hazardous Combustion Products Possible formation of carbon oxides, nitrogen oxides, and hazardous organic compounds.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge Yes. No information available.

5.3 Advice for firefighters

Evacuate personnel to safe areas. Move non-burning material, as feasible, to a safe location as soon as possible. As in any fire. wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool containers with flooding quantities of water until well after fire is out. Thoroughly decontaminate all protective equipment after use. DO NOT extinguish a fire resulting from the flow of flammable liquid until the flow of the liquid is effectively shut off. This precaution will help prevent the accumulation of an explosive vapor-air mixture after the initial fire is extinguished.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Ensure adequate ventilation. Stop leak if you can do it without risk. Refer to protective measures listed in sections 7 and 8. Avoid exceeding of the given occupational exposure limits (see section 8). Personal protection needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the training and the expertise of employees in the area responding to the spill. Avoid contact with skin, eyes and clothing.

6.2 Environmental precautions

Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological information.

6.3 Methods and materials for containment and cleaning up

Methods for Containment Absorb with earth, sand or other non-combustible material and transfer to containers for

later disposal. Prevent further leakage or spillage if safe to do so. Dike to collect large liquid

spills.

Use a non-combustible material like vermiculite, sand or earth to soak up the product and Methods for cleaning up

place into a container for later disposal. Ground and bond containers when transferring

material. Take precautionary measures against static discharges.

7. Handling and storage

7.1 Precautions for safe handling

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety Advice on safe handling

practice. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Do not eat, drink or smoke when using this product. Use according to package label instructions. Empty containers may retain product residue or vapor. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose

container to heat, flame, sparks, static electricity, or other sources of ignition. Take measures to prevent the build up of electrostatic charge. Avoid contact with skin, eyes and

clothing.

Remove and wash contaminated clothing before re-use. Avoid contact with skin, eyes and Hygiene measures

clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks

and immediately after handling the product.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and

sources of ignition. Keep in properly labeled containers. Keep away from food, drink and

animal feedingstuffs.

Materials to Avoid No materials to be especially mentioned.

8. Exposure controls/personal protection

8.1 Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWAEV
Ethylene glycol monobutyl ether 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m³ S*	TWA: 20 ppm	TWA: 20 ppm TWA: 97 mg/m³	TWA: 20 ppm TWA: 97 mg/m³	TWA: 20 ppm
Xylene 1330-20-7	STEL: 150 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 435 mg/m ³	TWA: 100 ppm STEL: 150 ppm	TWA: 100 ppm TWA: 434 mg/m ³ STEL: 150 ppm STEL: 651 mg/m ³	TWA: 100 ppm TWA: 434 mg/m ³ STEL: 150 ppm STEL: 651 mg/m ³	TWA: 100 ppm STEL: 150 ppm
Naphthalene 91-20-3	TWA: 10 ppm S*	TWA: 10 ppm TWA: 50 mg/m ³	TWA: 10 ppm STEL: 15 ppm Skin	TWA: 10 ppm TWA: 52 mg/m³ STEL: 15 ppm STEL: 79 mg/m³ Skin	TWA: 10 ppm TWA: 52 mg/m³ STEL: 15 ppm STEL: 79 mg/m³	TWA: 10 ppm STEL: 15 ppm Skin
CUMENE 98-82-8	TWA: 50 ppm	TWA: 50 ppm TWA: 245 mg/m³ S*	TWA: 25 ppm STEL: 75 ppm	TWA: 50 ppm TWA: 246 mg/m ³	TWA: 50 ppm TWA: 246 mg/m ³	TWA: 50 ppm

8.2 Appropriate engineering controls

Engineering Measures Ensure adequate ventilation, especially in confined areas. Use adequate ventilation to

maintain airborne concentrations at levels below permissible or recommended occupational

exposure limits.

8.3 Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear chemical-resistant glasses and/or goggles and a face shield when eye and face

contact is possible due to handling and processing of material.

Skin and body protectionWear impervious gloves and/or clothing if needed to prevent contact with the material.

Rubber/latex/neoprene or other suitable chemical resistant gloves. Remove and wash

contaminated clothing before re-use. Cotton-blend coveralls.

respiratory protection should be worn. Respiratory protection must be provided in

accordance with current local regulations.

Hygiene measures See section 7 for more information

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state Liquid **Appearance** Clear Color various

Odor Hvdrocarbon-like **Odor Threshold** No information available

Remarks • Methods **Property** Values

Not Applicable pН

Melting/freezing point No information available

Boiling point/boiling range No information available

Flash Point 39 °C / 102 °F

Evaporation rate No information available Flammability (solid, gas) No information available

Flammability Limits in Air

No information available upper flammability limit lower flammability limit No information available Vapor pressure No information available Vapor density No information available

Specific Gravity 0.891

Water solubility No information available Solubility in other solvents No information available Partition coefficient No information available **Autoignition temperature** No information available **Decomposition temperature** No information available

Viscosity, kinematic < 20 mm2/s

No information available Viscosity, dynamic

Explosive properties No information available **Oxidizing Properties** No information available

9.2 Other information

Volatile organic compounds (VOC) No information available

content

7.42 lb/gal **Density**

10. Stability and Reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use

10.2 Chemical stability

Stable under recommended storage conditions Unstable if heated > 100 deg C / 212 deg F.

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to Avoid

Keep away from heat, sparks and flames.

10.5 Incompatible Materials

None known based on information supplied.

10.6 Hazardous Decomposition Products

None under normal use conditions. Thermal decomposition can lead to release of irritating gases and vapors.

11. Toxicological information

11.1 Acute toxicity

Numerical measures of toxicity: Product Information

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

Unknown Acute Toxicity < 1% of the mixture consists of ingredient(s) of unknown toxicity

 Oral LD50
 2,191.00 mg/kg

 Dermal LD50
 4,948.00 mg/kg

 LC50 (Dust/Mist)
 14.20 mg/l

 LC50 (Vapor)
 51.00 mg/l

Numerical measures of toxicity: Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Solvent naphtha (petroleum), light aromatic 64742-95-6	-	> 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/m³(Rat)4 h
2-Ethylhexyl nitrate 27247-96-7	2000 mg/kg (Rat)	> 4820 mg/kg (Rabbit)	> 14 mg/L (Rat) 4 h
Heavy aromatic naphtha 64742-94-5	5000 mg/kg (Rat)	> 2 mL/kg(Rabbit)	> 590 mg/m³ (Rat) 4 h
Ethylene glycol monobutyl ether 111-76-2	470 mg/kg (Rat)	= 2000 mg/kg (Rabbit)	= 450 ppm (Rat) 4 h
Xylene 1330-20-7	3500 mg/kg (Rat)	> 4350 mg/kg (Rabbit)	= 29.08 mg/L (Rat) 4 h
Naphthalene 91-20-3	1110 mg/kg (Rat)	= 1120 mg/kg (Rabbit)	> 340 mg/m³ (Rat) 1 h
CUMENE 98-82-8	1400 mg/kg (Rat)	= 12300 μL/kg(Rabbit)	8700 ppm (Rat) 4-h

11.2 Information on toxicological effects

Skin corrosion/irritation

Product Information

· No information available

Component Information

No information available

Serious eye damage/eye irritation

Product Information

· No information available

Component Information

• No information available

Respiratory or skin sensitization

Product Information

· No information available

Component Information

• No information available

Germ cell mutagenicity

Product Information

• No information available

Component Information

· No information available

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Carcinogenicity

Product Information

- The table below indicates whether each agency has listed any ingredient as a carcinogen Component Information
- Contains a known or suspected carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
Naphthalene 91-20-3	-	Group 2B	Reasonably Anticipated	
CUMENE 98-82-8	-	Group 2B	Reasonably Anticipated	

Reproductive toxicity

Product Information

- No information available
- **Component Information**
- No information available

STOT - single exposure

No information available

STOT - repeated exposure

· No information available

Other adverse effects

Product Information

- No information available
- **Component Information**
- No information available

Aspiration hazard

Product Information

• Risk of serious damage to the lungs (by aspiration)

Component Information

· No information available

12. Ecological information

12.1 Toxicity

Ecotoxicity

No information available

< 1 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Ecotoxicity effects

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Solvent naphtha (petroleum), light aromatic 64742-95-6	-	LC50: 96 h Oncorhynchus mykiss 9.22 mg/L	EC50: 48 h Daphnia magna 6.14 mg/L
1,2,4-Trimethylbenzene 95-63-6	-	LC50: 96 h Pimephales promelas 7.19 - 8.28 mg/L flow-through	EC50: 48 h Daphnia magna 6.14 mg/L
Heavy aromatic naphtha 64742-94-5	-	LC50: 96 h Pimephales promelas 19 mg/L static LC50: 96 h Oncorhynchus mykiss 2.34 mg/L LC50: 96 h Lepomis macrochirus 1740 mg/L static LC50: 96 h Pimephales promelas 45 mg/L flow-through LC50: 96 h Pimephales promelas 41 mg/L	EC50: 48 h Daphnia magna 0.95 mg/L
Ethylene glycol monobutyl ether	-	LC50: 96 h Lepomis macrochirus	EC50: 48 h Daphnia magna 1000

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111-76-2		1490 mg/L static LC50: 96 h	mg/L
	Lepomis macrochirus 2950 mg/L		
Xylene	-	LC50: 96 h Pimephales promelas	EC50: 48 h water flea 3.82 mg/L
1330-20-7		23.53 - 29.97 mg/L static LC50: 96	LC50: 48 h Gammarus lacustris 0.6
		h Cyprinus carpio 780 mg/L	mg/L
		semi-static LC50: 96 h Cyprinus	_
		carpio 780 mg/L LC50: 96 h Poecilia	
		reticulata 30.26 - 40.75 mg/L static	
		LC50: 96 h Pimephales promelas	
		13.4 mg/L flow-through LC50: 96 h	
		Oncorhynchus mykiss 2.661 - 4.093	
		mg/L static LC50: 96 h	
		Oncorhynchus mykiss 13.5 - 17.3	
		mg/L LC50: 96 h Lepomis	
		macrochirus 13.1 - 16.5 mg/L	
		flow-through LC50: 96 h Lepomis	
		macrochirus 19 mg/L LC50: 96 h	
		Lepomis macrochirus 7.711 - 9.591	
		mg/L static	
Naphthalene	-	LC50: 96 h Pimephales promelas	LC50: 48 h Daphnia magna 2.16
91-20-3		5.74 - 6.44 mg/L flow-through LC50:	
		96 h Oncorhynchus mykiss 1.6	1.96 mg/L Flow through EC50: 48 h
		mg/L flow-through LC50: 96 h	Daphnia magna 1.09 - 3.4 mg/L
		Oncorhynchus mykiss 0.91 - 2.82	Static
		mg/L static LC50: 96 h Pimephales	
		promelas 1.99 mg/L static LC50: 96	
		h Lepomis macrochirus 31.0265	
		mg/L static	
CUMENE	EC50: 72 h Pseudokirchneriella	LC50: 96 h Pimephales promelas	EC50: 48 h Daphnia magna 0.6
98-82-8	subcapitata 2.6 mg/L	6.04 - 6.61 mg/L flow-through LC50:	
		96 h Oncorhynchus mykiss 4.8	7.9 - 14.1 mg/L Static
		mg/L flow-through LC50: 96 h	
		Oncorhynchus mykiss 2.7 mg/L	
		semi-static LC50: 96 h Poecilia	
		reticulata 5.1 mg/L semi-static	

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

Discharge into the environment must be avoided

Chemical Name	log Pow
1,2,4-Trimethylbenzene 95-63-6	3.63
2-Ethylhexyl nitrate 27247-96-7	4.14
Heavy aromatic naphtha 64742-94-5	6.1
Ethylene glycol monobutyl ether 111-76-2	0.81
Xylene 1330-20-7	3.15
Naphthalene 91-20-3	3.3
CUMENE 98-82-8	3.55

12.4 Mobility in soil

No information available.

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1 Waste treatment methods

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

14. Transport Information

This product is not regulated by US DOT when shipped by ground in containers < 119 Note

gallons.

DOT

Proper shipping name NA1993, Combustible liquid, n.o.s. (petroleum distillates, 1,2,4-trimethylbenzene), 3, III **Marine Pollutant**

This product contains a chemical which is listed as a marine pollutant according to DOT

MEX no data available

IMDG

UN1993, Flammable liquid, n.o.s. (petroleum distillates, 1,2,4-trimethylbenzene), 3, III Proper shipping name Marine pollutant

Marine pollutant This product contains a chemical which is listed as a marine pollutant

according to IMDG/IMO Description (2-ethylhexyl nitrate)

IATA

Proper shipping name UN1993, Flammable liquid, n.o.s. (petroleum distillates, 1,2,4-trimethylbenzene), 3, III

15. Regulatory information

Ultra Low Sulfur Additives: The sulfur content of this Diesel Fuel Additive does not exceed 15 parts per million (ppm). References: Code of Federal Regulations Title 40 Part 80, EPA 2006 Regulation of Fuels and Fuel Additives, EPA Document # EPA40-F-05-013.

15.1 International Inventories

TSCA Complies Complies **DSL**

EINECS/ELINCS ENCS

IECSC Complies **KECL** Complies

PICCS

AICS Complies

NZIoC

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

DSL - Canadian Domestic Substances List

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

PICCS - Philippines Inventory of Chemicals and 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

NZIoC - New Zealand Inventory of Chemicals

15.2 U.S. Federal Regulations

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	SARA 313 - Threshold Values %
1,2,4-Trimethylbenzene 95-63-6	1.0
Ethylene glycol monobutyl ether 111-76-2	1.0
Xylene 1330-20-7	1.0
Naphthalene 91-20-3	0.1

15.3 Pesticide Information

Not applicable

15.4 U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
Naphthalene - 91-20-3	Carcinogen
CUMENE - 98-82-8	Carcinogen

L	Chemical Name	California Prop. 65
	Naphthalene - 91-20-3	Carcinogen
	CUMENE - 98-82-8	Carcinogen
_		

16.	Other	infori	mation
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NFPA_	Health Hazard 2	Flammability 2	Instability 1	Physical and chemical
				hazards -
HMIS_	Health Hazard 2*	Flammability 2	Physical Hazard 1	Personal protection X

Legend:

ACGIH (American Conference of Governmental Industrial Hygienists)

Ceiling (C)

DOT (Department of Transportation)

EPA (Environmental Protection Agency)

IARC (International Agency for Research on Cancer)

International Air Transport Association (IATA)

International Maritime Dangerous Goods (IMDG)

NIOSH (National Institute for Occupational Safety and Health)

NTP (National Toxicology Program)

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

PEL (Permissible Exposure Limit)

Reportable Quantity (RQ)

Skin designation (S*)

STEL (Short Term Exposure Limit)

TLV® (Threshold Limit Value)

TWA (time-weighted average)

Revision Date 25-Apr-2016

Revision Note

No information available

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet