SAFETY DATA SHEET



Revision Date 02-Sep-2015 Version 2.01

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

1.1 Product identifier

Product name DIESEL GUARD D-THAW

Product code DGDTBK

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

Recommended Use 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.

3400 Dundee Road Northbrook, IL 60062 (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
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 Call a POISON CENTER or doctor/physician if you feel unwell

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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up

Store in 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

3. Composition/Information on Ingredients

Substance Not applicable

<u>Mixture</u>

| Chemical Name | CAS-No | Weight % |
|---|------------|----------|
| Solvent naphtha (petroleum), light aromatic | 64742-95-6 | 50 - 60 |
| 1,2,4-Trimethylbenzene | 95-63-6 | 20 - 30 |
| Isopropyl alcohol | 67-63-0 | 10 - 20 |

| Xylene | 1330-20-7 | 1 - 5 |
|--------|-----------|-------|
| 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.

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)

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 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

Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). 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.

6.2 Environmental precautions

Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

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.

Methods for cleaning up

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

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

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

practice. Avoid contact with skin, eyes and clothing. 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.

Hygiene measures Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this

product. Remove and wash contaminated clothing before re-use. 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 |
|-------------------|---------------|----------------------------|------------------|-----------------------------|------------------------------|---------------|
| Isopropyl alcohol | STEL: 400 ppm | TWA: 400 ppm | TWA: 200 ppm | TWA: 200 ppm | TWA: 400 ppm | TWA: 200 ppm |
| 67-63-0 | TWA: 200 ppm | TWA: 980 mg/m ³ | STEL: 400 ppm | TWA: 492 mg/m ³ | TWA: 985 mg/m ³ | STEL: 400 ppm |
| | | | | STEL: 400 ppm | STEL: 500 ppm | |
| | | | | STEL: 984 mg/m ³ | STEL: 1230 mg/m ³ | |
| Xylene | STEL: 150 ppm | TWA: 100 ppm | TWA: 100 ppm | TWA: 100 ppm | TWA: 100 ppm | TWA: 100 ppm |
| 1330-20-7 | TWA: 100 ppm | TWA: 435 mg/m ³ | STEL: 150 ppm | TWA: 434 mg/m ³ | TWA: 434 mg/m ³ | STEL: 150 ppm |
| | | | | STEL: 150 ppm | STEL: 150 ppm | |
| | | | | STEL: 651 mg/m ³ | STEL: 651 mg/m ³ | |
| CUMENE | TWA: 50 ppm | TWA: 50 ppm | TWA: 25 ppm | TWA: 50 ppm | TWA: 50 ppm | TWA: 50 ppm |

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| 98-82-8 | TWA: 245 mg | g/m³ STEL: 75 ppm | TWA: 246 mg/m ³ | TWA: 246 mg/m ³ | |
|---------|-------------|-------------------|----------------------------|----------------------------|--|
| | S* | | | | |

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 If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

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 stateLiquidAppearanceClearColorvarious

Odor Hydrocarbon-like

Odor Threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Methods</u>

pH Not Applicable

Melting/freezing point No information available

Boiling point/boiling range No information available

Flash Point 23 °C / 73 °F

Evaporation rate No information available

Flammability (solid, gas)

No information available

Flammability Limits in Air
upper flammability limit

No information available

No information available

Vapor pressureNo information availableVapor densityNo information available

Specific Gravity 0.8477

Water solubility

Solubility in other solvents

Partition coefficient

Autoignition temperature

Decomposition temperature

No information available
No information available
No information available
No information available

Viscosity, kinematic < 20 mm2/s

Viscosity, dynamic No information available

Explosive propertiesNo information availableOxidizing PropertiesNo information available

9.2 Other information

Volatile organic compounds (VOC) No information available

content

10. Stability and Reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions

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

 Oral LD50
 4,060.00 mg/kg

 Dermal LD50
 7,568.00 mg/kg

 LC50 (Vapor)
 62.00 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 |
| Isopropyl alcohol 67-63-0 | 5840 mg/kg (Rat) | = 13,900 mg/kg (Rabbit) | = 72600 mg/m³ (Rat) 4 h |
| Xylene 1330-20-7 | 3500 mg/kg (Rat) | > 4350 mg/kg (Rabbit) | = 29.08 mg/L (Rat) 4 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

Eye damage/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

Carcinogenicity

Product Information

• The table below indicates whether each agency has listed any ingredient as a carcinogen

Component Information

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|------------------------------|-------|----------|------------------------|------|
| Isopropyl alcohol 67-63-0 | - | Group 3 | - | |
| 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

• No information available

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 |
| Isopropyl alcohol 67-63-0 | EC50: 96 h Desmodesmus subspicatus 1000 mg/L EC50: 72 h Desmodesmus subspicatus 1000 mg/L | LC50: 96 h Pimephales promelas 9640 mg/L flow-through LC50: 96 h Pimephales promelas 11130 mg/L static LC50: 96 h Lepomis macrochirus 1400000 µg/L | EC50: 48 h Daphnia magna 13299 mg/L |
| Xylene 1330-20-7 | - | LC50: 96 h Pimephales promelas 23.53 - 29.97 mg/L static LC50: 96 h Cyprinus carpio 780 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 | EC50: 48 h water flea 3.82 mg/L LC50: 48 h Gammarus lacustris 0.6 mg/L |
| CUMENE 98-82-8 | EC50: 72 h Pseudokirchneriella subcapitata 2.6 mg/L | LC50: 96 h Pimephales promelas 6.04 - 6.61 mg/L flow-through LC50: 96 h Oncorhynchus mykiss 4.8 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 | EC50: 48 h Daphnia magna 0.6 mg/L EC50: 48 h Daphnia magna 7.9 - 14.1 mg/L 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 |
| Isopropyl alcohol 67-63-0 | 0.05 |
| Xylene 1330-20-7 | 3.15 |
| 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

DOT

Proper shipping name UN1993, Flammable liquid, n.o.s. (isopropyl alcohol, petroleum distillates), 3, III

MEX no data available

IMDG

Proper shipping name UN1993, Flammable liquid, n.o.s. (isopropyl alcohol, petroleum distillates), 3, III

IATA

Proper shipping name UN1993, Flammable liquid, n.o.s. (isopropyl alcohol, petroleum distillates), 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 **DSL** Complies Complies **EINECS/ELINCS** Complies **ENCS IECSC** Complies Complies **KECL PICCS** Complies **AICS** Complies **NZIoC** Complies

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

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 | SARA 313 - Threshold Values % |
|-----------------------------------|-------------------------------|
| 1,2,4-Trimethylbenzene 95-63-6 | 1.0 |
| Isopropyl alcohol 67-63-0 | 1.0 |
| Xylene 1330-20-7 | 1.0 |

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 |
|------------------|---------------------|
| CUMENE - 98-82-8 | Carcinogen |

16. Other information

NFPA Health Hazard 2 Flammability 3 Instability 0 Physical and chemical

hazards -

HMIS Health Hazard 2* Flammability 3 Physical Hazard 0 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

02-Sep-2015

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