

SAFETY DATA SHEET**SECTION 1. IDENTIFICATION****Product identifier used on the label**: **VALVE-MEDIC****Product Code(s)** : M3712C**Recommended use of the chemical and restrictions on use**: Engine oil additive for cleaning valves.
Restrictions on use: Not available.**Chemical family** : Mixture of: diesel fuel; Base oil; Lubricating oil additive**Name, address, and telephone number of the supplier:****Radiator Specialty Co., of Canada**3-3055 Dundas St West, Suite 50
Mississauga, ON, Canada
L5L 3R8

Supplier's Telephone # : (905) 625-9117 (Mon. - Fri., 8 am - 4 pm)

24 Hr. Emergency Tel # : Not available.**Name, address, and telephone number of the manufacturer:**

Refer to supplier

SECTION 2. HAZARDS IDENTIFICATION**Classification of the chemical**

Black liquid. Petroleum solvent odour.

Most important hazards:

Flammable liquid and vapour. May be ignited by open flames and sparks.

Aspiration hazard. Can enter the lungs and cause damage. Irritating to skin. Irritating to respiratory system. Inhalation may cause central nervous system depression. Possible cancer hazard - contains material which may cause cancer. Occupational exposure to the substance or mixture may cause adverse effects. For further information, please refer to section 11 of the SDS.

Toxic to aquatic life with long lasting effects. Avoid release to the environment. See Section 12 for more environmental information.

This product is packaged and sold as a consumer product. The Hazardous Products Act (HPA) does not apply to consumer products [Hazardous Products Act Section 12(j)]. The below WHMIS 2015 classification and labeling information is being provided for informational purposes.

This material is classified as hazardous under Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Classification:

Flammable liquid - Category 3

Aspiration toxicity - Category 1

Skin corrosion/irritation - Category 2

Carcinogenicity - Category 2

Specific target organ toxicity, single exposure - Category 3 (Respiratory irritation; Narcotic effects)

Label elements*Hazard pictogram(s)**Signal Word***DANGER!***Hazard statement(s)*Flammable liquid and vapour.
May be fatal if swallowed and enters airways.
Causes skin irritation.
May cause respiratory irritation.
May cause drowsiness or dizziness.
Suspected of causing cancer.

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Precautionary statement(s)

Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking.
 Keep container tightly closed.
 Ground/Bond container and receiving equipment.
 Use explosion-proof electrical and ventilating equipment.
 Use only non-sparking tools.
 Take precautionary measures against static discharge.
 Avoid breathing mist or vapours.
 Wash exposed skin thoroughly after handling.
 Use only outdoors or in a well-ventilated area.
 Wear protective gloves/clothing and eye/face protection.

IF exposed or concerned: Get medical advice/attention.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

In case of fire, use dry chemical, CO₂, or alcohol foam to extinguish.

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

Keep cool.

Store locked up.

Dispose of contents/container in accordance with local regulation.

Other hazards

Other hazards which do not result in classification:

Toxic fumes may be released during a fire. Direct eye contact may cause slight or mild, transient irritation. May cause gastrointestinal irritation. Prolonged overexposure may cause slight liver and kidney effects, such as increased organ weights.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

<u>Chemical name</u>	<u>Common name and synonyms</u>	<u>CAS #</u>	<u>Concentration (% by weight)</u>
Fuels, diesel, no. 2	petroleum distillates	68476-34-6	80.0 - 100.0
Note: The Diesel fuel component contains the following chemicals:			
<i>Kerosene</i>	<i>Kerosine, petroleum</i>	8008-20-6	0 - 44.78
<i>Alkanes, C10-20-branched and linear</i>	<i>Renewable hydrocarbons (diesel type fraction)</i>	928771-01-1	0 - 4.48
<i>Naphthalene</i>	<i>Naphthalin Tar camphor</i>	91-20-3	0.01 - 0.45
Distillates (petroleum), hydrotreated heavy naphthenic	Base oil	64742-52-5	7.0 - 13.0

Note: The exact concentrations of the above listed chemicals are being withheld as a trade secret.

This product is packaged and sold as a consumer product. The Hazardous Products Act (HPA) does not apply to consumer products [Hazardous Products Act Section 12(j)].

SECTION 4. FIRST-AID MEASURES**Description of first aid measures**

Ingestion

: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep victim's head lowered (forward) to reduce the risk of aspiration.

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- Inhalation* : IF INHALED: Remove person to fresh air and keep comfortable for breathing. If breathing is difficult, give oxygen by qualified medical personnel only. If breathing stops, provide artificial respiration. Call a POISON CENTER or doctor/physician if you feel unwell.
- Skin contact* : IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
- Eye contact* : Rinse immediately with plenty of water, also under the eyelids. IF exposed or concerned: Get medical advice/attention.

Most important symptoms and effects, both acute and delayed

- : May be fatal if swallowed and enters airways. Aspiration hazard Aspiration into the lungs during swallowing or subsequent vomiting may cause chemical pneumonitis, which can be fatal.
- May cause respiratory irritation. Symptoms may include upper respiratory irritation, coughing and breathing difficulties. Inhalation may cause headache, nausea and central nervous effects such as dizziness, coordination difficulties and unconsciousness.
- Causes skin irritation. Contact may cause redness, swelling and a painful sensation.
- Suspected of causing cancer. Symptoms may include persistent coughing, shortness of breath, coughing up blood and wheezing.
- Direct eye contact may cause slight or mild, transient irritation. Direct eye contact may cause slight redness.
- Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
- Prolonged or repeated contact may cause drying, cracking and defatting of the skin.
- Prolonged overexposure may cause slight liver and kidney effects, such as increased organ weights.

Indication of any immediate medical attention and special treatment needed

- : Immediate medical attention is required. Product may present an aspiration hazard, if ingested in large amounts, causing life-threatening lung injury.
- Provide general supportive measures and treat symptomatically.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

- : Carbon dioxide (CO₂); Dry chemical; Alcohol resistant foam

Unsuitable extinguishing media

- : Do not use a solid water stream as it may scatter and spread fire.

Special hazards arising from the substance or mixture / Conditions of flammability

- : Flammable liquid and vapour. May be ignited by open flames and sparks. Vapours may be heavier than air and may collect in confined and low-lying areas. Material will float on water and can be re-ignited at the water's surface. Toxic fumes, gases or vapours may evolve on burning. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

Hazardous combustion products

- : Carbon oxides; Reactive hydrocarbons; Aldehydes; Sulfur oxides; Nitrogen oxides (NO_x); Polycyclic aromatic hydrocarbons; Other unidentified organic compounds.

Special protective equipment and precautions for firefighters

Protective equipment for fire-fighters

- : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Special fire-fighting procedures

- : Move containers from fire area if safe to do so. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses. Dike for water control.

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SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

- : Keep people away from and upwind of spill/leak. Restrict access to area until completion of clean-up. Wear appropriate protective equipment. Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Prevent product from entering drains, sewers, waterways and soil. Avoid release to the environment.

Methods and material for containment and cleaning up

- : Ventilate the area. Remove all sources of ignition. Prevent further leakage or spillage if safe to do so. Use only non-sparking tools. For spilled liquids: absorb spill with inert, non-combustible material such as sand, then place into suitable containers. Do not use combustible absorbents, such as sawdust. Pick up and transfer to properly labeled containers. Contaminated absorbent material may pose the same hazards as the spilled product. Contact the proper local authorities. .
Refer to Section 13 for disposal of contaminated material.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

- : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
Use only outdoors or in a well-ventilated area. Wear suitable protective equipment during handling. Wear protective gloves/clothing and eye/face protection. Avoid breathing mist or vapours. Avoid contact with skin, eyes and clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking. Ground/Bond container and receiving equipment. Use explosion-proof electrical and ventilating equipment. Use only non-sparking tools. Take precautionary measures against static discharges. Keep away from incompatibles. Keep container tightly closed when not in use. Wash thoroughly after handling. Empty containers retain residue (liquid and/or vapour) and can be dangerous.

Conditions for safe storage : Store in cool/well-ventilated place. Store locked up. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. No smoking. Have appropriate fire extinguishers and spill clean-up equipment in or near storage area. Keep away from incompatibles.

Incompatible materials : Strong oxidizing agents; Strong acids; Strong alkalis; Halogenated compounds

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:

<u>Chemical Name</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>	
	<u>TWA</u>	<u>STEL</u>	<u>PEL</u>	<u>STEL</u>
Fuels, diesel, no. 2	100 mg/m ³ (vapor and aerosol, as total hydrocarbons) (skin)	N/Av	N/Av	N/Av
Kerosene	200 mg/m ³ (skin)	N/Av	N/Av	N/Av
Alkanes, C10-20-branched and linear	N/Av	N/Av	N/Av	N/Av
Naphthalene	10 ppm (skin)	N/Av	10 ppm (50 mg/m ³)	N/Av
Distillates (petroleum), hydrotreated heavy naphthenic	5 mg/m ³ (As 'Oil mist, mineral') (inhalable)	N/Av	5 mg/m ³ (As 'Oil mist, mineral')	N/Av

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Exposure controls

Ventilation and engineering measures

- : Use only outdoors or in a well-ventilated area. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. In case of insufficient ventilation wear suitable respiratory equipment.

Respiratory protection

- : If airborne concentrations are above the permissible exposure limit or are not known, use NIOSH-approved respirators. Refer to CSA Z94.3 or other appropriate standards. Advice should be sought from respiratory protection specialists.

Skin protection

- : Wear protective gloves/clothing. The suitability for a specific workplace should be discussed with the producers of the protective gloves. Wear resistant clothing and boots. Depending on conditions of use, an impervious apron should be worn.

Eye / face protection

- : Wear eye/face protection. Wear as appropriate: Tightly fitting safety goggles; Safety glasses with side shields. A full face shield may also be necessary.

Other protective equipment

- : Ensure that eyewash stations and safety showers are close to the workstation location. Other equipment may be required depending on workplace standards.

General hygiene considerations

- : Avoid breathing mist or vapours. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

- : Black liquid.

Odour

- : Petroleum solvent odor.

Odour threshold

- : N/Av

pH

- : N/Av

Melting/Freezing point

- : Melting point: N/Av
Freezing point: N/Av

Initial boiling point and boiling range

- : 165.6°C (330°F) (estimation)

Flash point

- : 58.9°C (138°F)

Flashpoint (Method)

- : Tag closed cup

Evaporation rate (BuAe = 1)

- : N/Av

Flammability (solid, gas)

- : Not applicable.

Lower flammable limit (% by vol.)

- : N/Av

Upper flammable limit (% by vol.)

- : N/Av

Oxidizing properties

- : No oxidizing properties.

Explosive properties

- : Not explosive

Vapour pressure

- : 2.67 hPa (estimated)

Vapour density

- : N/Av

Relative density / Specific gravity

- : Relative density: 836 kg/m³
Specific Gravity: 0.84

Solubility in water

- : Insoluble.

Other solubility(ies)

- : N/Av

Partition coefficient: n-octanol/water or Coefficient of water/oil distribution

- : N/Av

Auto-ignition temperature

- : 260°C (500°F) (estimation)

Decomposition temperature

- : N/Av

Viscosity

- : < 10 mm²/sec @ 40°C (104°F)

Volatiles (% by weight)

- : 0.87% (estimated)

Volatile organic Compounds (VOC's)

- : N/Av

Absolute pressure of container

- : N/Av

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Flame projection length : N/Ap
Other physical/chemical comments : No additional information.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not normally reactive.
Chemical stability : Stable under normal conditions.
Possibility of hazardous reactions : Hazardous polymerization does not occur.
Conditions to avoid : Keep away from heat, sparks and flame. Do not use in areas without adequate ventilation. Avoid contact with incompatible materials.
Incompatible materials : Strong oxidizing agents; Strong acids; Strong alkalis; Halogenated compounds
Hazardous decomposition products : Not available.
Refer also to hazardous combustion products, Section 5.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Routes of entry inhalation : YES
Routes of entry skin & eye : YES
Routes of entry Ingestion : YES

Routes of exposure skin absorption : YES

Potential Health Effects:

Signs and symptoms of short-term (acute) exposure

Sign and symptoms Inhalation

: May cause respiratory irritation. Symptoms may include upper respiratory irritation, coughing and breathing difficulties. May cause central nervous system effects. Inhalation of high concentrations may cause dizziness, disorientation, incoordination, narcosis, nausea or narcotic effects.

Sign and symptoms ingestion

: May be fatal if swallowed and enters airways. Aspiration hazard. Aspiration into the lungs during swallowing or subsequent vomiting may cause chemical pneumonitis, which can be fatal. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Sign and symptoms skin

: Causes skin irritation. Contact may cause redness, swelling and a painful sensation. May be absorbed through the skin.

Sign and symptoms eyes

: Direct eye contact may cause slight or mild, transient irritation. Direct eye contact may cause slight redness.

Potential Chronic Health Effects

: Prolonged or repeated skin exposure may cause redness, a burning sensation, drying and cracking of the skin (dermatitis). Prolonged overexposure may cause slight kidney effects, such as increased organ weight.

Mutagenicity : No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

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- Carcinogenicity** : This material is classified as hazardous under Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification:
Carcinogenicity - Category 2. Suspected of causing cancer. Symptoms may include persistent coughing, shortness of breath, coughing up blood and wheezing.
Contains: Fuels, diesel, no. 2; Naphthalene.
Studies have shown that similar products to Fuels, diesel, no. 2 produce skin tumors in laboratory animals following repeated applications without washing or removal. The significance of this finding to human exposure has not been determined.
Naphthalene is classified as carcinogenic by IARC (Group 2B) and NTP (Group 2 - Reasonably anticipated).
- Reproductive effects & Teratogenicity** : This product is not expected to cause reproductive or developmental effects.
- Sensitization to material** : No data available to indicate product or components may be skin sensitizers.
No data available to indicate product or components may be respiratory sensitizers.
- Specific target organ effects** : This material is classified as hazardous under Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification:
Specific target organ toxicity, single exposure - Category 3. May cause respiratory irritation.
May cause drowsiness or dizziness.

According to the classification criteria of Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015), this product is not expected to cause specific target organ toxicity (STOT) through repeated exposures.
- Medical conditions aggravated by overexposure** : Pre-existing skin, eye, respiratory and central nervous system disorders.
- Synergistic materials** : None known or reported by the manufacturer.
- Toxicological data** : Not classified for acute toxicity based on available data. No data is available on the product itself. The calculated ATE values for this mixture are:
ATE inhalation (mists) = 5.3 - 6.7 mg/L/4H

See below for individual ingredient acute toxicity data.

<u>Chemical name</u>	<u>LC₅₀ (4hr)</u> <u>inh, rat</u>	<u>LD₅₀</u>	
		<u>(Oral, rat)</u>	<u>(Rabbit, dermal)</u>
Fuels, diesel, no. 2	> 4.81, < 6 mg/L (aerosol)	7600 mg/kg	> 4300 mg/kg
Note: The Diesel fuel component contains the following chemicals:			
Kerosene	> 5.28 mg/L (No mortality)	> 5000 mg/kg	> 2000 mg/kg (No mortality)
Alkanes, C10-20-branched and linear	> 6317.3 ppm (vapour) (No mortality)	> 2000 mg/kg (No mortality)	> 2000 mg/kg (No mortality)
Naphthalene	N/Av	490 mg/kg (rat) 533 mg/kg (mouse)	> 20 000 mg/kg
Distillates (petroleum), hydrotreated heavy naphthenic	> 5 mg/L (mist)	> 5000 mg/kg	> 2000 mg/kg

Other important toxicological hazards

- : None known or reported by the manufacturer.

SECTION 12. ECOLOGICAL INFORMATION

- Ecotoxicity** : Toxic to aquatic life with long lasting effects. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters. The product contains the following substances which are hazardous for the environment: Fuels, diesel, no. 2; Kerosene; Naphthalene.
See the following tables for individual ingredient ecotoxicity data.

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Ecotoxicity data:

<u>Ingredients</u>	CAS No	Toxicity to Fish		
		LC50 / 96h	NOEC / 21 day	M Factor
Fuels, diesel, no. 2	68476-34-6	35 mg/L (Fathead minnow)	N/Av	None.
Kerosene	8008-20-6	20 mg/L (Rainbow trout) (Read-across)	N/Av	None.
Alkanes, C10-20-branched and linear	928771-01-1	> 1000 mg/L (Rainbow trout)	N/Av	None.
Naphthalene	91-20-3	0.96 mg/L (pink salmon)	0.12 mg/L (40 days)	1
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	> 100 mg/L (Fathead minnow)	N/Av	None.

<u>Ingredients</u>	CAS No	Toxicity to Daphnia		
		EC50 / 48h	NOEC / 21 day	M Factor
Fuels, diesel, no. 2	68476-34-6	6.4 mg/L (Daphnia magna)	0.2 mg/L	None.
Kerosene	8008-20-6	1.4 mg/L (Daphnia magna) (Read-across)	0.48 mg/L (Read-across)	None.
Alkanes, C10-20-branched and linear	928771-01-1	> 100 mg/L (Daphnia magna)	N/Av	None.
Naphthalene	91-20-3	3.4 mg/L (Daphnia magna)	0.22 - 0.6 mg/L	None.
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	> 10 000 mg/L (Daphnia magna)	10 mg/L	None.

<u>Ingredients</u>	CAS No	Toxicity to Algae		
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor
Fuels, diesel, no. 2	68476-34-6	> 10 mg/L/72hr (Green algae)	1 mg/L/72hr	None.
Kerosene	8008-20-6	6.2 mg/L/96hr (Green algae) (Read-across)	0.4 mg/L/96hr (Read-across)	None.
Alkanes, C10-20-branched and linear	928771-01-1	> 100 mg/L/72hr (Green algae)	N/Av	None.
Naphthalene	91-20-3	0.4 mg/L/72hr (Skeletonema costatum)	N/Av	1
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	> 1000 mg/L/96hr (Green algae)	≥ 100 mg/L/72hr	None.

Persistence and degradability

- : The product itself has not been tested.
The following ingredients are considered to be readily biodegradable: Alkanes, C10-20-branched and linear.
Contains the following chemicals which are considered to be inherently biodegradable:
Fuels, diesel, no. 2.
Contains the following chemicals which are not readily biodegradable: Kerosene; Naphthalene.

Bioaccumulation potential

- : The product itself has not been tested. See the following data for ingredient information.

<u>Components</u>	<u>Partition coefficient n-octanol/water (log Kow)</u>	<u>Bioconcentration factor (BCF)</u>
Fuels, diesel, no. 2 (CAS 68476-34-6)	3.9 - 6	N/Av

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Kerosene (CAS 8008-20-6)	3.3, > 6	70 - > 5000 (Fish) (calculated)
Alkanes, C10-20-branched and linear (CAS 928771-01-1)	> 6.5	116.3 (QSAR)
Naphthalene (CAS 91-20-3)	3.7	427 (Fathead minnow)
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	3.9 - 6 (calculated)	N/Av

Mobility in soil : The product itself has not been tested.

Other Adverse Environmental effects


: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13. DISPOSAL CONSIDERATIONS

Handling for Disposal : Handle in accordance with good industrial hygiene and safety practice. Refer to protective measures listed in sections 7 and 8. This material and its container must be disposed of in a safe way. Empty containers retain residue and can be dangerous. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

Methods of Disposal : Dispose of in accordance with federal, provincial and local hazardous waste laws.

SECTION 14. TRANSPORT INFORMATION

Regulatory Information	UN Number	UN proper shipping name	Transport hazard class(es)	Packing Group	Label
TDG	UN1268	PETROLEUM PRODUCTS, N.O.S.	3	III	
TDG Additional information	Not regulated for road or rail shipment if packaged in non-bulk containers (450 Litres or less each). Within Canada only, the 'Flammable Liquids General Exemption' may apply. Section 1.33 of the Regulations is an exemption permitting the transportation of this product in small means of containment as not regulated.				

Special precautions for user : Appropriate advice on safety must accompany the package. Keep away from heat, sparks and open flame. - No smoking.

Environmental hazards : This product meets the criteria for an environmentally hazardous material according to the IMDG Code. See Section 12 for more environmental information.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

: Not applicable.

SECTION 15 - REGULATORY INFORMATION

Canadian Information:

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

Canadian National Pollutant Release Inventory (NPRI): This product contains the following substances listed on the NPRI:
Naphthalene (Part 1, Group A Substance)

WHMIS information: Refer to Section 2 for a WHMIS Classification for this product.

US Federal Information:

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

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International Information:

Components listed below are present on the following International Inventory list:

<u>Ingredients</u>	<u>CAS #</u>	<u>European EINECS</u>	<u>Australia AICS</u>	<u>Philippines PICCS</u>	<u>Japan ENCS</u>	<u>Korea KECI/KECL</u>	<u>China IECSC</u>	<u>New Zealand IOC</u>
Fuels, diesel, no. 2	68476-34-6	270-676-1	Present	Present	(9)-1700	KE-17287	Present	May be used as a single component chemical under an appropriate group standard.
Kerosene	8008-20-6	232-366-4	Present	Present	(9)-1702	KE-21778	Present	May be used as a single component chemical under an appropriate group standard.
Alkanes, C10-20-branched and linear	928771-01-1	N/Av	Present	Not specifically listed.	Not specifically listed.	Not specifically listed.	Not specifically listed.	Not specifically listed.
Naphthalene	91-20-3	202-049-5	Present	Present	(4)-311	KE-25545	Present	HSR001287
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	265-155-0	Present	Present	(9)-1689	KE-12543	Present	May be used as a single component chemical under an appropriate group standard.

SECTION 16. OTHER INFORMATION

Legend

: ACGIH: American Conference of Governmental Industrial Hygienists
AICS: Australian Inventory of Chemical Substances
CAS: Chemical Abstract Services
CSA: Canadian Standards Association
EC50: Effective Concentration 50%
EINECS: European Inventory of Existing Commercial chemical Substances
ENCS: Existing and New Chemical Substances
HSDB: Hazardous Substances Data Bank
IARC: International Agency for Research on Cancer
IBC: Intermediate Bulk Container
IECSC: Inventory of Existing Chemical Substances
IMDG: International Maritime Dangerous Goods
IOC: Inventory of Chemicals
KECI: Korean Existing Chemicals Inventory
KECL: Korean Existing Chemicals List
LC: Lethal Concentration
LD: Lethal Dose
N/Av: Not Applicable
N/Av: Not Available
NIOSH: National Institute of Occupational Safety and Health
NOEC: No observable effect concentration
NTP: National Toxicology Program
OECD: Organisation for Economic Co-operation and Development
OSHA: Occupational Safety and Health Administration
PEL: Permissible exposure limit
PICCS: Philippine Inventory of Chemicals and Chemical Substances
RTECS: Registry of Toxic Effects of Chemical Substances
SDS: Safety Data Sheet
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values

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TSCA: Toxic Substance Control Act

TWA: Time Weighted Average

WHMIS: Workplace Hazardous Materials Identification System

References

- : 1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices for 2018.
- 2. International Agency for Research on Cancer Monographs, searched 2019.
- 3. Canadian Centre for Occupational Health and Safety, CCIInfoWeb databases, 2019 (Chempendium, HSDB and RTECs).
- 4. Material Safety Data Sheets from manufacturer.
- 5. OECD - The Global Portal to Information on Chemical Substances - eChemPortal, 2019.

Preparation Date (mm/dd/yyyy)

: 02/20/2019

Other special considerations for handling

: Provide adequate information, instruction and training for operators.

<u>Prepared for:</u> Radiator Specialty Co. of Canada 3-3055 Dundas St West, Suite 50 Mississauga, ON, Canada, L5L 3R8 Telephone: 905-625-9117 (Mon. - Fri., 8 AM - 4 PM) Please direct all enquiries to Radiator Specialty.	
<u>Prepared by:</u> ICC The Compliance Center Inc. Telephone: (888) 442-9628 (U.S.): (888) 977-4834 (Canada) http://www.thecompliancecenter.com	

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