

SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

Product identifier used on the label

: **Throttle Body & Air Intake Valve Cleaner**

Product Code(s) : M4712C

Recommended use of the chemical and restrictions on use

: Fuel injection system cleaner.
Uses advised against None known.

Chemical family : Mixture of: Aromatic hydrocarbons; Ketones; Propellant; Petroleum hydrocarbon; Alcohol

Name, address, and telephone number of the supplier:

Radiator Specialty Co., of Canada

1711 Aimco Blvd.
Mississauga, ON, Canada
L4W 1H7

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

24 Hr. Emergency Tel # : In case of transportation emergencies: (613) 996-6666 (CANUTEC)

Name, address, and telephone number of the manufacturer:

Refer to supplier

SECTION 2. HAZARDS IDENTIFICATION

Classification of the chemical

Clear to yellow liquid, contained in a pressurized aerosol can. Aromatic odour.

Most important hazards:

Extremely flammable aerosol. May be ignited by open flames and sparks. Contents under pressure. Container may explode if heated.

Aspiration hazard. Can enter the lungs and cause damage. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. Inhalation may cause central nervous system depression. Suspected of causing cancer. Suspected of damaging the unborn child. May cause damage to organs through prolonged or repeated exposure. 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 material is classified as hazardous under Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).
Classification:

Flammable aerosol - Category 1

Gases under pressure

Aspiration toxicity - Category 1

Skin corrosion/irritation - Category 2

Eye damage/irritation - Category 2A

Carcinogenicity - Category 2

Reproductive toxicity - Category 2

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

Specific target organ toxicity, repeated exposure - Category 2

Label elements

Hazard pictogram(s)



Signal Word

DANGER!

SAFETY DATA SHEET

Hazard statement(s)

Extremely flammable aerosol.
Contains gas under pressure; may explode if heated.
May be fatal if swallowed and enters airways.
Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.
May cause drowsiness or dizziness.
Suspected of causing cancer.
Suspected of damaging the unborn child.
May cause damage to organs through prolonged or repeated exposure.

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. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not breathe mist or vapor. Use only outdoors or in a well-ventilated area. Wash exposed skin thoroughly after handling. 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.

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.

Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

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. Prolonged or repeated contact may cause drying, cracking and defatting of the skin. Ingestion of larger amounts may cause defects to the central nervous system (e.g. dizziness, headache). 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>
Toluene	Methylbenzene Phenylmethane	108-88-3	15.0 - 40.0
Xylene	Dimethylbenzene; Methyltoluene; Xylol	1330-20-7	10.0 - 30.0
Acetone	2-Propanone Methyl ketone	67-64-1	10.0 - 30.0
Ethylbenzene	Ethylbenzol Phenylethane	100-41-4	5.0 - 10.0
Carbon dioxide	Carbonic anhydride	124-38-9	1.0 - 5.0
Distillates (petroleum), hydrotreated heavy naphthenic	Mineral oil	64742-52-5	0.5 - 1.5
Methanol	Carbinol Methyl alcohol Methyl hydrate	67-56-1	0.5 - 1.5
Hydrotreated light naphthenic distillate	Petroleum hydrocarbon	64742-53-6	0.5 - 1.5

Note: The % concentrations for the above listed chemicals will vary from batch to batch. Concentrations listed represent the actual concentration range for each chemical.

SAFETY DATA SHEET

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.
- 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* : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Flush eyes with water for at least 15 minutes. If eye irritation persists: 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.
Causes serious eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
Suspected of causing cancer. Symptoms may include persistent coughing, shortness of breath, coughing up blood and wheezing.
Suspected of damaging the unborn child. Symptoms may include reduced fetal weight, delayed ossification and persistent behavioural effects.
May cause damage to organs through prolonged or repeated exposure. Contains: Toluene. Toluene may cause damage to the brain and nervous system through prolonged or repeated exposure, if inhaled. Symptoms may include memory loss, sleep disturbances, incoordination or loss of ability to concentrate.
Ingestion of larger amounts may cause defects to the central nervous system (e.g. dizziness, headache).
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; Water fog .
- 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

- : Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Material will float on water and can be re-ignited at the water's surface. This product is contained under pressure, and could explode when exposed to heat and flame.

Hazardous combustion products

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

SAFETY DATA SHEET

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. Shield personnel to protect from venting or rupturing containers. Do not allow run-off from fire fighting to enter drains or water courses. Dike for water control.

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. Do not breathe mist or vapor. Avoid contact with skin, eyes and clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Keep away from incompatibles. Always replace cap after use. Wash thoroughly after handling.

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. Protect from sunlight and do not expose to temperatures exceeding 50 °C/122 °F. Do not store near any incompatible materials (see Section 10).

Incompatible materials

- : Strong oxidizing agents; Strong acids; 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>
Toluene	20 ppm	N/Av	200 ppm	300 ppm (Ceiling)
Xylene	100 ppm	150 ppm	100 ppm (435 mg/m ³)	N/Av
Acetone	250 ppm	500 ppm	1000 ppm (2400 mg/m ³)	N/Av

SAFETY DATA SHEET

Ethylbenzene	20 ppm	N/Av	100 ppm (435 mg/m ³)	N/Av
Carbon dioxide	5000 ppm	30 000 ppm	5000 ppm (9000 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
Methanol	200 ppm (skin)	250 ppm (skin)	200 ppm (260 mg/m ³)	N/Av
Hydrotreated light naphthenic distillate	5 mg/m ³ (As 'Oil mist, mineral') (inhalable)	N/Av	5 mg/m ³ (As 'Oil mist, mineral')	N/Av

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 chemically protective gloves (impervious), boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear impervious gloves, such as nitrile rubber. Unsuitable material Natural Rubber; PVC; Neoprene.

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

: Do not breathe mist or vapor. 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

: Clear to yellow liquid, contained in a pressurized aerosol can.

Odour

: aromatic

Odour threshold

: N/Av

pH

: N/Av

Melting/Freezing point

: N/Av

Initial boiling point and boiling range

: N/Av

Flash point

: - 5°C (23°F)

Flashpoint (Method)

: N/Av

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

: None known.

Explosive properties

: Aerosols are sensitive to mechanical impact. Closed containers are contained under pressure and may explode if exposed to excess heat for a prolonged period of time.

Vapour pressure

: N/Av

Vapour density

: N/Av

Relative density / Specific gravity

: 0.845 @ 15°C (59°F)

SAFETY DATA SHEET

Solubility in water : negligible
Other solubility(ies) : N/Av
Partition coefficient: n-octanol/water or Coefficient of water/oil distribution
: N/Av
Auto-ignition temperature : N/Av
Decomposition temperature : N/Av
Viscosity : < 1 mm²/sec (concentrate)
Volatiles (% by weight) : 75%
Volatile organic Compounds (VOC's)
: N/Av
Absolute pressure of container
: N/Av
Flame projection length : > 60 cm, < 80 cm
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 : Direct sources of heat. Do not use in areas without adequate ventilation. Avoid contact with incompatible materials. Protect from sunlight and do not expose to temperatures exceeding 50 °C/122 °F.
Incompatible materials : Strong oxidizing agents; Strong acids; Halogenated compounds
Hazardous decomposition products
: None known, refer to hazardous combustion products in 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. In extremely high concentrations, product may act as an asphyxiant and cause increased breathing and pulse rates, fatigue and unconsciousness.

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 of larger amounts may cause defects to the central nervous system (e.g. dizziness, headache).

Sign and symptoms skin

: Causes skin irritation. Contact may cause redness, swelling and a painful sensation. May be absorbed through the skin. If product is sprayed directly on skin, symptoms of frostbite may be experienced including numbness, prickling and itching.

Sign and symptoms eyes

: Causes serious eye irritation. Symptoms may include stinging, tearing, redness, swelling and blurred vision. If product is sprayed directly into the eyes, could cause freezing of the eye.

SAFETY DATA SHEET

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.

Carcinogenicity

: This material is classified as hazardous under Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification: Carcinogenicity - Category 2. Suspected of causing cancer. Contains Ethylbenzene. Ethylbenzene is classified as carcinogenic by IARC (Group 2B) and ACGIH (Category A3). Symptoms may include persistent coughing, shortness of breath, coughing up blood and wheezing.

Reproductive effects & Teratogenicity

: This material is classified as hazardous under Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification: Reproductive toxicity - Category 2. Suspected of damaging the unborn child. Contains: Toluene; Xylene. Toluene may cause fetotoxic effects at doses which are not maternally toxic, based on animal data. Symptoms in offspring may include reduced fetal weight, behavioral effects, delayed skeletal formation and hearing loss. Xylene may cause fetotoxic effects (e.g. reduced fetal weight, delayed ossification, behavioral effects) at doses which are not maternally toxic, based on animal data. Symptoms may include reduced fetal weight, delayed ossification and persistent behavioural effects.

This product is not expected to cause reproductive 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. Contains: Methanol. Inhalation of methanol vapours may cause substantial visual effects, including irritation, blurred vision, and blindness. However, the concentration in this mixture is below the concentration cutoff required for classification.

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 oral = 6573 - 13,096 mg/kg
- ATE dermal = 41,809 mg/kg
- ATE inhalation (vapours) = 30.1 - 70.8 mg/L/4H
- ATE inhalation (mists) = 145 - 436 mg/L/4H

See below for individual ingredient acute toxicity data.

<u>Chemical name</u>	<u>LC₅₀ (4hr)</u>	<u>LD₅₀</u>	
	<u>inh. rat</u>	<u>(Oral, rat)</u>	<u>(Rabbit, dermal)</u>
Toluene	7585 ppm (28.1 mg/L) (vapour)	5580 mg/kg	12 125 mg/kg
Xylene	6350 ppm (27.6 mg/L) (vapour)	3253 mg/kg	12 180 mg/kg
Acetone	30 000 ppm (71 mg/L) (vapour)	5800 mg/kg	> 15 800 mg/kg
Ethylbenzene	4000 ppm (17.4 mg/L) (vapour)	3500 mg/kg	15 380 mg/kg

SAFETY DATA SHEET

Carbon dioxide	200 000 ppm/2H (141 421 ppm/4H)	N/Ap(gas)	N/Ap(gas)
Distillates (petroleum), hydrotreated heavy naphthenic	> 5 mg/L (mist)	> 5000 mg/kg	> 2000 mg/kg
Methanol	> 5000 ppm/6H (4.1 mg/L/4H (vapour))	5628 mg/kg (rat) The estimated human lethal dose is: 300 - 1000 mg/kg	> 393 mg/kg (Monkey) 15 800 mg/kg (rabbit)
Hydrotreated light naphthenic distillate	≥ 2.18 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: Toluene; Xylene.
 See the following tables for individual ingredient ecotoxicity data.

Ecotoxicity data:

<u>Ingredients</u>	CAS No	Toxicity to Fish		
		LC50 / 96h	NOEC / 21 day	M Factor
Toluene	108-88-3	5.4 mg/L (pink salmon)	1.4 - 4.0 mg/L	None.
Xylene	1330-20-7	8.2 mg/L (Rainbow trout)	N/Av	None.
Acetone	67-64-1	6210 mg/L (Fathead minnow)	N/Av	None.
Ethylbenzene	100-41-4	4.2 mg/L (Rainbow trout)	1.13 mg/L (30 days) (QSAR)	None.
Carbon dioxide	124-38-9	N/Ap	N/Ap	N/Ap
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	> 100 mg/L (Fathead minnow)	N/Av	None.
Methanol	67-56-1	15 400 mg/L (Bluegill sunfish)	446.7 mg/L/28-day (Fathead minnow) (QSAR)	None.
Hydrotreated light naphthenic distillate	64742-53-6	> 100 mg/L (Fathead minnow)	N/Av	None.

<u>Ingredients</u>	CAS No	Toxicity to Daphnia		
		EC50 / 48h	NOEC / 21 day	M Factor
Toluene	108-88-3	3.78 mg/L Ceriodaphnia (water flea)	0.53 - 1 mg/L	None.
Xylene	1330-20-7	3.2 - 9.56 mg/L (Daphnia magna)	N/Av	None.
Acetone	67-64-1	15 800 mg/L (Daphnia magna)	1660 mg/L	None.
Ethylbenzene	100-41-4	1.81 mg/L (Daphnia magna)	N/Av	None.
Carbon dioxide	124-38-9	N/Ap	N/Ap	N/Ap
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	> 10 000 mg/L (Daphnia magna)	10 mg/L	None.
Methanol	67-56-1	> 10 000 mg/L (Daphnia magna)	208 mg/L (QSAR)	None.
Hydrotreated light naphthenic distillate	64742-53-6	> 10 000 mg/L (Daphnia magna)	10 mg/L (NOEL)	None.

SAFETY DATA SHEET

<u>Ingredients</u>	CAS No	Toxicity to Algae		
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor
Toluene	108-88-3	N/Av	10 mg/L/72hr (Green algae)	None.
Xylene	1330-20-7	3.2 - 4.9 mg/L/72hr (Green algae)	N/Av	None.
Acetone	67-64-1	7000 mg/L/96hr (Green algae)	N/Av	None.
Ethylbenzene	100-41-4	3.6 mg/L/96hr (Green algae)	3.4 mg/L/96hr	None.
Carbon dioxide	124-38-9	N/Av	N/Av	N/Av
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	> 1000 mg/L/96hr (Green algae)	≥ 100 mg/L/72hr	None.
Methanol	67-56-1	22 000 mg/L/96hr (Green algae)	N/Av	None.
Hydrotreated light naphthenic distillate	64742-53-6	N/Av	> 100 mg/L/72hr (NOEL)	None.

Persistence and degradability

- : The product itself has not been tested.
 The following ingredients are considered to be readily biodegradable: Toluene; Acetone; Methanol.
 Contains the following chemicals which are considered to be inherently biodegradable: Xylene; Ethylbenzene; Distillates (petroleum), hydrotreated heavy naphthenic.
 Contains the following chemicals which are not readily biodegradable: Hydrotreated light naphthenic distillate.

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>
Toluene (CAS 108-88-3)	2.65	90
Xylene (CAS 1330-20-7)	3.12 - 3.2	50 - 58
Acetone (CAS 67-64-1)	0.24	0.65 (Fish)
Ethylbenzene (CAS 100-41-4)	3.15	1.1 - 1.5
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	3.9 - 6 (calculated)	N/Av
Methanol (CAS 67-56-1)	- 0.82 to - 0.64	< 10 (common carp)
Hydrotreated light naphthenic distillate (CAS 64742-53-6)	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




- : This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of in accordance with local regulations.

Methods of Disposal

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

SAFETY DATA SHEET

SECTION 14. TRANSPORT INFORMATION

Regulatory Information	UN Number	UN proper shipping name	Transport hazard class(es)	Packing Group	Label
TDG	UN1950	AEROSOLS	2.1	None	
TDG Additional information	May be shipped as LIMITED QUANTITY when transported in containers no larger than 1.0 Litre, in packages not exceeding 30 kg gross mass. Under the TDG, refer to Section 1.17 for additional exemption requirements, if shipping under this exemption.				
ICAO/IATA	UN1950	Aerosols, flammable	3	None	
ICAO/IATA Additional information	Refer to the appropriate Packing Instruction, prior to shipping this material. Review all State and Operator Variations, prior to shipping this material.				
IMDG	UN1950	AEROSOLS	2.1	None	
IMDG Additional information	May be shipped as LIMITED QUANTITY when transported in containers no larger than 1.0 Litre, in packages not exceeding 30 kg gross mass.				

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:
 Toluene (Part 1, Group A Substance; Part 5: Individual Substances)
 Xylene (Part 1: Group A; Part 5: Isomer Groups)
 Ethylbenzene (Part 1, Group A Substance)
 Methanol (Part 1, Group A Substance; Part 5: Individual Substances)

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.

International Information:

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

Ingredients	CAS #	European EINECS	Australia AICS	Philippines PICCS	Japan ENCS	Korea KECI/KECL	China IECSC	New Zealand IOC
Toluene	108-88-3	203-625-9	Present	Present	(3)-2	KE-33936	Present	HSR001227
Xylene	1330-20-7	215-535-7	Present	Present	(3)-60; (3)-3	KE-35427	Present	HSR000983
Acetone	67-64-1	200-662-2	Present	Present	(2)-542	KE-29367	Present	HSR001070
Ethylbenzene	100-41-4	202-849-4	Present	Present	(3)-60; (3)-28	KE-13532	Present	HSR001151

SAFETY DATA SHEET

Carbon dioxide	124-38-9	204-696-9	Present	Present	(1)-310; (1)-169	KE-04683	Present	HSR001018
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.
Methanol	67-56-1	200-659-6	Present	Present	(2)-201	KE-23193	Present	HSR001186
Hydrotreated light naphthenic distillate	64742-53-6	265-156-6	Present	Present	(9)-1692	KE-12552	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
- : KECL: Korean Existing Chemicals Inventory
- : KECL: Korean Existing Chemicals List
- : LC: Lethal Concentration
- : LD: Lethal Dose
- : N/Ap: 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
- : 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 2017.
- : 2. International Agency for Research on Cancer Monographs, searched 2017.
- : 3. Canadian Centre for Occupational Health and Safety, CCIInfoWeb databases, 2017 (Chempendium, HSDB and RTECs).
- : 4. Material Safety Data Sheets from manufacturer.
- : 5. OECD - The Global Portal to Information on Chemical Substances - eChemPortal, 2017.

Preparation Date (mm/dd/yyyy)

: 09/12/2017

SAFETY DATA SHEET

Other special considerations for handling

: Provide adequate information, instruction and training for operators.

<p>Prepared for: Radiator Specialty Co. of Canada 1711 Aimco Blvd. Mississauga, ON, Canada, L4W 1H7 Telephone: 905-625-9117 (Mon. - Fri., 8 AM - 4 PM) Please direct all enquiries to Radiator Specialty.</p>	
<p>Prepared by: ICC The Compliance Center Inc. Telephone: (888) 442-9628 (U.S.): (888) 977-4834 (Canada) http://www.thecompliancecenter.com</p>	

DISCLAIMER

This Safety Data Sheet was prepared by ICC The Compliance Center Inc. using information provided by Radiator Specialty Co. of Canada and CCOHS' Web Information Service. The information in the Safety Data Sheet is offered for your consideration and guidance when exposed to this product. ICC The Compliance Center Inc and Radiator Specialty Co. of Canada expressly disclaim all expressed or implied warranties and assume no responsibilities for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.

This Safety Data Sheet may not be changed, or altered in any way without the expressed knowledge and permission of ICC The Compliance Center Inc. and Radiator Specialty Co. of Canada.

END OF DOCUMENT