

SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

Product identifier used on the label

: FUEL STABILIZER

Product Code(s) : M5312C

Recommended use of the chemical and restrictions on use

: Fuel additive.
No restrictions on use known.

Chemical family : Mixture of: Mineral spirits; Hydrocarbons; Phenols; Amines; Dyes

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 # : No information available.

Name, address, and telephone number of the manufacturer:

Refer to supplier

SECTION 2. HAZARDS IDENTIFICATION

Classification of the chemical

Clear, red liquid. Petroleum odour.

Most important hazards:

Flammable liquid and vapour. May be ignited by open flame.

Aspiration hazard. Can enter the lungs and cause damage. Irritating to skin. Inhalation may cause central nervous system depression. Possible cancer hazard - contains material which may cause cancer. Contains material which can cause birth defects based on animal data. 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

Reproductive toxicity - Category 2

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

Specific target organ toxicity, repeated exposure - Category 1

Label elements

Hazard pictogram(s)



Signal Word

DANGER!

SAFETY DATA SHEET

Hazard statement(s)

Flammable liquid and vapour.
 May be fatal if swallowed and enters airways.
 Causes skin irritation.
 May cause drowsiness or dizziness.
 Suspected of causing cancer.
 Suspected of damaging the unborn child.
 Causes 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.
 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.
 Do not breathe mist or vapor.
 Wash exposed skin thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Use only outdoors or in a well-ventilated area.
 Wear 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 carbon dioxide, dry chemical or 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. Mild respiratory irritant. 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>
Mineral spirits <i>The composition of Mineral spirits may vary between the three following CAS #'s, or may be a mixture of all three:</i>			80.0 - 100.0
stoddard solvent	Mineral spirits White spirit	8052-41-3	
Solvent naphtha (petroleum), medium aliphatic	White spirit stoddard solvent	64742-88-7	
Naphtha (petroleum), hydrotreated heavy	Odorless mineral spirits	64742-48-9	
Solvent naphtha (petroleum), light aromatic	Aromatic naphtha	64742-95-6	1.0 - 5.0
Polyolefin alkyl phenol alkyl amine	Not available	Proprietary	1.0 - 5.0

SAFETY DATA SHEET

2,6-Di-tert-butylphenol	2,6-Bis(1,1-dimethylethyl)phenol	128-39-2	0.5 - 1.5
1,2,4-Trimethylbenzene	Pseudocumene	95-63-6	0.5 - 1.5
Xylene	Dimethylbenzene; Methyltoluene; Xylol	1330-20-7	0.1 - 1.0
Cumene	Isopropyl Benzene	98-82-8	0.1 - 1.0
2,4,6-Tris(1,1-dimethylethyl)phenol	2,4,6-tri-tert-butylphenol	732-26-3	0.1 - 1.0

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.
- 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.
- 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.
- Suspected of damaging the unborn child. Symptoms may include reduced fetal weight, delayed ossification and persistent behavioural effects.
- Causes damage to organs through prolonged or repeated exposure. May result in irreversible neurological symptoms such as problems with memory, visuospatial skills (e.g. depth perception), fatigue, muscle control, peripheral nerves (e.g. tingling in the hands and feet), and seizures.
- Direct eye contact may cause slight or mild, transient irritation. Direct eye contact may cause slight redness.
- Mild respiratory irritant. May cause coughing and breathing difficulties.
- Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
- 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.

SAFETY DATA SHEET

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. This material may be ignited by heat, sparks and direct flame. Vapours may be heavier than air and may collect in confined and low-lying areas. Product may float, and be re-ignited at the water's surface. Toxic fumes, gases or vapours may evolve on burning.

Hazardous combustion products

- : Carbon oxides; Aldehydes; 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.

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. Ground/Bond container and receiving equipment. Use explosion-proof electrical and ventilating equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep away from incompatibles. Wash thoroughly after handling. Keep container tightly closed when not in use. Keep out of reach of children.

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 bases; Reducing agents

SAFETY DATA SHEET

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>
stoddard solvent	100 ppm	N/Av	500 ppm (2900 mg/m ³)	N/Av
Solvent naphtha (petroleum), medium aliphatic	N/Av	N/Av	500 ppm (2000 mg/m ³) (as petroleum distillates, naphtha)	N/Av
Naphtha (petroleum), hydrotreated heavy	N/Av	N/Av	N/Av	N/Av
Solvent naphtha (petroleum), light aromatic	N/Av	N/Av	N/Av	N/Av
Polyolefin alkyl phenol alkyl amine	N/Av	N/Av	N/Av	N/Av
2,6-Di-tert-butylphenol	N/Av	N/Av	N/Av	N/Av
1,2,4-Trimethylbenzene	25 ppm (mixed isomers)	N/Av	25 ppm (trimethylbenzene isomers) (final rule limit)	N/Av
Xylene	100 ppm	150 ppm	100 ppm (435 mg/m ³)	N/Av
Cumene	50 ppm	N/Av	50 ppm (245 mg/m ³) (Skin)	N/Av
2,4,6-Tris(1,1-dimethylethyl)phenol	N/Av	N/Av	N/Av	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 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

- : Do not breathe mist or vapor. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. 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, red liquid.
- Odour** : Petroleum odour.
- Odour threshold** : N/Av
- pH** : N/Av
- Melting/Freezing point** : - 70°C (- 94°F) (estimation)

SAFETY DATA SHEET**Initial boiling point and boiling range**

: 157°C (314.6°F) (estimation)

Flash point : 39.4°C (103°F)**Flashpoint (Method)** : closed cup**Evaporation rate (BuAe = 1)** : N/Av**Flammability (solid, gas)** : Not applicable.**Lower flammable limit (% by vol.)**

: 0.7% (estimation)

Upper flammable limit (% by vol.)

: 6% (estimation)

Oxidizing properties : None known.**Explosive properties** : Not explosive**Vapour pressure** : 0.29 hPa (estimation)**Vapour density** : N/Av**Relative density / Specific gravity**

: Specific Gravity : 0.77

Solubility in water : N/Av**Other solubility(ies)** : N/Av**Partition coefficient: n-octanol/water or Coefficient of water/oil distribution**

: N/Av

Auto-ignition temperature : 109.44°C (229°F) (estimation)**Decomposition temperature** : N/Av**Viscosity** : < 10 cSt @ 40°C (104°F)**Volatiles (% by weight)** : 8.9% (estimated)**Volatile organic Compounds (VOC's)**

: N/Av

Absolute pressure of container

: N/Av

Flame projection length : N/Av**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 open flames. Do not use in areas without adequate ventilation. Avoid contact with incompatible materials.**Incompatible materials** : Strong oxidizing agents; Strong bases; Reducing agents**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

SAFETY DATA SHEET

Potential Health Effects:

Signs and symptoms of short-term (acute) exposure

Sign and symptoms Inhalation

- : Inhalation of high concentrations may cause dizziness, disorientation, incoordination, narcosis, nausea or narcotic effects. Mild respiratory irritant. May cause coughing and breathing difficulties.

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.

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: Cumene. Cumene is classified as possibly carcinogenic by IARC (Group 2B).

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. Symptoms may include reduced fetal weight, delayed ossification and persistent behavioural effects.
Contains: Xylene.

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 drowsiness or dizziness.

Specific target organ toxicity, repeated exposure - Category 1. Causes damage to organs through prolonged or repeated exposure. Contains: stoddard solvent. May result in irreversible neurological symptoms such as problems with memory, visuospatial skills (e.g. depth perception), fatigue, muscle control, peripheral nerves (e.g. tingling in the hands and feet), and seizures.

Medical conditions aggravated by overexposure

- : Pre-existing skin, eye, respiratory and central nervous system disorders.

Synergistic materials

- : None known or reported by the manufacturer.

SAFETY DATA SHEET

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 = 488,759 mg/kg

ATE dermal = 36,041 mg/kg

ATE inhalation (vapours) = 21.7 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>
Mineral spirits			
<i>The composition of Mineral spirits may vary between the three following CAS #'s, or may be a mixture of all three:</i>			
stoddard solvent	> 5.5 mg/L (vapour)	> 5000 mg/kg	> 3000 mg/kg
Solvent naphtha (petroleum), medium aliphatic	> 5.5 mg/L (vapour)	> 5000 mg/kg (No mortality)	> 2000 mg/kg (No mortality)
Naphtha (petroleum), hydrotreated heavy	> 5.04 mg/L (vapour)	> 7000 mg/kg	> 2000 mg/kg (No mortality)
Solvent naphtha (petroleum), light	> 17.7 mg/L (vapour)	8400 mg/kg	> 3160 mg/kg
Polyolefin alkyl phenol alkyl amine	N/Av	N/Av	N/Av
2,6-Di-tert-butylphenol	N/Av	> 5000 mg/kg	1000 - 32,000 mg/kg
1,2,4-Trimethylbenzene	18 mg/L (vapour)	5000 mg/kg	> 3160 mg/kg
Xylene	6350 ppm (27.6 mg/L) (vapour)	3253 mg/kg	12 180 mg/kg
Cumene	8000 ppm (39 mg/L) (vapour)	2260 mg/kg	10 627 mg/kg
2,4,6-Tris(1,1-dimethylethyl) phenol	N/Av	1610 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: Mineral spirits; Aromatic naphtha; 2,6-Di-tert-butylphenol; 1,2,4-Trimethylbenzene; Xylene; Cumene; 2,4,6-Tris(1,1-dimethylethyl)phenol.

See the following tables for individual ingredient ecotoxicity data.

SAFETY DATA SHEET

Ecotoxicity data:

<u>Ingredients</u>	CAS No	Toxicity to Fish		
		LC50 / 96h	NOEC / 21 day	M Factor
stoddard solvent	8052-41-3	2.1 - 4.2 mg/L (Bluegill sunfish)	N/Av	None.
Solvent naphtha (petroleum), medium aliphatic	64742-88-7	2 - 5 mg/L (Rainbow trout)	0.098 mg/L/28-day (QSAR) (NOEL)	None.
Naphtha (petroleum), hydrotreated heavy	64742-48-9	8.2 mg/L (Fathead minnow)	N/Av	None.
Solvent naphtha (petroleum), light aromatic	64742-95-6	9.2 mg/L (Rainbow trout)	N/Av	None.
Polyolefin alkyl phenol alkyl amine	Proprietary	N/Av	N/Av	None.
2,6-Di-tert-butylphenol	128-39-2	1.4 mg/L (Fathead minnow)	0.13 mg/L (30 days) (Fish) (QSAR)	None.
1,2,4-Trimethylbenzene	95-63-6	7.72 mg/L (Fathead minnow)	N/Av	None.
Xylene	1330-20-7	8.2 mg/L (Rainbow trout)	N/Av	None.
Cumene	98-82-8	4.8 mg/L (Rainbow trout)	N/Av	None.
2,4,6-Tris(1,1-dimethylethyl)phenol	732-26-3	0.0609 mg/L (Fathead minnow)	N/Av	10

<u>Ingredients</u>	CAS No	Toxicity to Daphnia		
		EC50 / 48h	NOEC / 21 day	M Factor
stoddard solvent	8052-41-3	0.42 - 2.3 mg/L (Daphnia magna)	0.1 - 0.37 mg/L	None.
Solvent naphtha (petroleum), medium aliphatic	64742-88-7	1.4 mg/L (Daphnia magna)	0.48 mg/L (QSAR) (NOEL)	None.
Naphtha (petroleum), hydrotreated heavy	64742-48-9	32 mg/L (Daphnia magna)	6.3 mg/L	None.
Solvent naphtha (petroleum), light aromatic	64742-95-6	6.16 mg/L (Daphnia magna)	N/Av	None.
Polyolefin alkyl phenol alkyl amine	Proprietary	N/Av	N/Av	None.
2,6-Di-tert-butylphenol	128-39-2	0.45 mg/L (Daphnia magna)	0.035 mg/L	1
1,2,4-Trimethylbenzene	95-63-6	3.6 mg/L (Daphnia magna)	N/Av	None.
Xylene	1330-20-7	3.2 - 9.56 mg/L (Daphnia magna)	N/Av	None.
Cumene	98-82-8	4 mg/L/24hr (Daphnia magna)	N/Av	None.
2,4,6-Tris(1,1-dimethylethyl)phenol	732-26-3	0.11 mg/L (Daphnia magna)	0.36 mg/L	1

<u>Ingredients</u>	CAS No	Toxicity to Algae		
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor
stoddard solvent	8052-41-3	0.58 - 1.2 mg/L/72hr (Green algae)	0.16 mg/L/72hr	None.
Solvent naphtha (petroleum), medium aliphatic	64742-88-7	1 - 3 mg/L/72hr (Green algae)	1 mg/L/72hr (Green algae) (NOEL)	None.

SAFETY DATA SHEET

Naphtha (petroleum), hydrotreated heavy	64742-48-9	45 mg/L/96hr (Green algae)	18 mg/L/96hr	None.
Solvent naphtha (petroleum), light aromatic	64742-95-6	N/Av	N/Av	None.
Polyolefin alkyl phenol alkyl amine	Proprietary	N/Av	N/Av	None.
2,6-Di-tert-butylphenol	128-39-2	1.2 mg/L/96hr (Green algae)	0.64 mg/L/96hr	None.
1,2,4-Trimethylbenzene	95-63-6	2.356 mg/L/96hr (Green algae) (QSAR)	N/Av	None.
Xylene	1330-20-7	3.2 - 4.9 mg/L/72hr (Green algae)	N/Av	None.
Cumene	98-82-8	2.6 mg/L/72hr (Green algae)	N/Av	None.
2,4,6-Tris(1,1-dimethylethyl)phenol	732-26-3	> 0.32 mg/L/72hr (Green algae)	0.32 mg/L/72hr	None.

Persistence and degradability

- : The product itself has not been tested.
- The following ingredients are considered to be readily biodegradable: Mineral spirits.
- Contains the following chemicals which are considered to be inherently biodegradable: Aromatic naphtha; Xylene; Cumene.
- Contains the following chemicals which are not readily biodegradable: 2,6-Di-tert-butylphenol; 1,2,4-Trimethylbenzene; 2,4,6-Tris(1,1-dimethylethyl)phenol.

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>
stoddard solvent (CAS 8052-41-3)	3.16 - 7.06	N/Av
Solvent naphtha (petroleum), medium aliphatic (CAS 64742-88-7)	3.7 - 6.7	142 - 11,430 (Fish) (calculated)
Naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)	2.1 - 6 (calculated)	10 - 2500 (calculated)
Solvent naphtha (petroleum), light aromatic (CAS 64742-95-6)	2.1 - 6 (calculated)	10 - 2500 (calculated)
2,6-Di-tert-butylphenol (CAS 128-39-2)	4.92	800
1,2,4-Trimethylbenzene (CAS 95-63-6)	3.78	31 - 275
Xylene (CAS 1330-20-7)	3.12 - 3.2	50 - 58
Cumene (CAS 98-82-8)	3.55	224 (calculated)
2,4,6-Tris(1,1-dimethylethyl)phenol (CAS 732-26-3)	6.06	4320 - 23,200 (common carp)

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.

SAFETY DATA SHEET

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	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:

stoddard solvent (Part 5: Other groups and mixtures)
 Solvent naphtha (petroleum), medium aliphatic (Part 5: Other groups and mixtures)
 Naphtha (petroleum), hydrotreated heavy (Part 5: Other groups and mixtures)
 Solvent naphtha (petroleum), light aromatic (Part 5: Other groups and mixtures)
 1,2,4-Trimethylbenzene (Part 1, Group A Substance; Part 5: Individual Substances)
 Xylene (Part 1: Group A; Part 5: Isomer Groups)
 Cumene (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.

International Information:

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

<u>Ingredients</u>	CAS #	European EINECs	Australia AICS	Philippines PICCS	Japan ENCS	Korea KECI/KECL	China IECSC	New Zealand IOC
stoddard solvent	8052-41-3	232-489-3	Present	Present	(9)-1702; (9)-1702	KE-32199	Present	HSR001498
Solvent naphtha (petroleum), medium aliphatic	64742-88-7	265-191-7	Present	Present	(9)-1700	KE-31664	Present	May be used as a single component chemical under an appropriate group standard.
Naphtha (petroleum), hydrotreated heavy	64742-48-9	265-150-3	Present	Present	(9)-1690	KE-25622	Present	May be used as a single component chemical under an appropriate group standard.

SAFETY DATA SHEET

Solvent naphtha (petroleum), light aromatic	64742-95-6	265-199-0	Present	Present	(9)-1698	KE-31662	Present	May be used as a single component chemical under an appropriate group standard.
Polyolefin alkyl phenol alkyl amine	Proprietary	N/Av	N/Av	N/Av	N/Av	N/Av	N/Av	N/Av
2,6-Di-tert-butylphenol	128-39-2	204-884-0	Present	Present	(3)-526; (3)-521	KE-03085	Present	HSR005197
1,2,4-Trimethylbenzene	95-63-6	202-436-9	Present	Present	(3)-7; (3)-3427	KE-34410	Present	HSR001382
Xylene	1330-20-7	215-535-7	Present	Present	(3)-60; (3)-3	KE-35427	Present	HSR000983
Cumene	98-82-8	202-704-5	Present	Present	(3)-32; (3)-22	KE-23957	Present	HSR001184
2,4,6-Tris(1,1-dimethylethyl)phenol	732-26-3	211-989-5	Present	Present	(3)-540	KE-34806	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
 IECS: 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
 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 2018.
 3. Canadian Centre for Occupational Health and Safety, CCIInfoWeb databases, 2018 (Chempendium, HSDB and RTECS).
 4. Material Safety Data Sheets from manufacturer.
 5. OECD - The Global Portal to Information on Chemical Substances - eChemPortal, 2018.

SAFETY DATA SHEET**Preparation Date (mm/dd/yyyy)**

: 01/23/2019

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	

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