SDS Preparation Date (mm/dd/yyyy): 03/21/2019

SAFETY DATA SHEET

M2716C; M2732C Page 1 of 8

Name, address, and telephone number of

Refer to supplier

SECTION 1. IDENTIFICATION

Product identifier used on the label

: POWER STEERING FLUID

Product Code(s) : M2716C; M2732C

Recommended use of the chemical and restrictions on use

Hydraulic fluid for power steering. Restrictions on use: Not available.

Chemical family : Lubricating oil

Name, address, and telephone number of

the supplier: the manufacturer:

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.

SECTION 2. HAZARDS IDENTIFICATION

Classification of the chemical

Amber liquid. Petroleum odour.

Most important hazards:

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. Avoid release to the environment. See Section 12 for more environmental information.

This material is not classified under Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Label elements

Hazard pictogram(s)

None required according to Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Signal Word

None required according to Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Hazard statement(s)

None required according to Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Precautionary statement(s)

None required according to Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Other hazards

Other hazards which do not result in classification:

Toxic fumes may be released during a fire. May cause slight eye and skin irritation. Mild respiratory irritant. May cause gastrointestinal irritation. Prolonged overexposure may cause slight liver effects, such as increased organ weights.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

<u>Chemical name</u>	Common name and synonyms	CAS#	Concentration (% by weight)
Lubricating oils (petroleum), hydrotreated spent	Petroleum oil Refined base oil	64742-58-1	80.0 - 100.0

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

POWER STEERING FLUID M2716C; M2732C

SAFETY DATA SHEET

SECTION 4. FIRST-AID MEASURES

Description of first aid measures

Ingestion : If ingested, do not induce vomiting. Never give anything by mouth to an unconscious person.

Call a physician.

Inhalation : If inhaled, move to fresh air. If breathing has stopped, give artificial respiration. If breathing is

difficult, give oxygen by qualified medical personnel only. If irritation or symptoms develop,

Page 2 of 8

seek medical attention.

Skin contact : In case of contact with skin, wash with mild soap and plenty of water. Remove contaminated

clothing and shoes. If irritation or symptoms develop, seek medical attention.

Eye contact : Immediately flush eyes with running water for at least 5 to 10 minutes. If irritation occurs or persists, seek medical attention.

Most important symptoms and effects, both acute and delayed

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

Direct eye contact may cause slight or mild, transient irritation. Symptoms may include

stinging and tearing.

Mild respiratory irritant. May cause coughing and breathing difficulties. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Prolonged overexposure may cause slight liver effects, such as increased organ weights.

Indication of any immediate medical attention and special treatment needed

: Provide general supportive measures and treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

: Use media suitable to the surrounding fire such as water fog or fine spray, alcohol foams, carbon dioxide and dry chemical.

Unsuitable extinguishing media

: Do not use water jet, as this may spread burning material.

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

Not flammable under normal conditions of use. However, may burn if exposed to extreme heat and flame. Product may float, and 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; Nitrogen oxides (NOx); Sulfur oxides; Phosphorus oxides; Reactive hydrocarbons; 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. Water spray may be useful in cooling equipment exposed to heat and flame. 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

: All persons dealing with the clean-up should wear the appropriate chemically protective equipment. Keep all other personnel upwind and away from the spill/release. Restrict access to area until completion of clean-up. Refer to protective measures listed in sections 7 and 8.

Environmental precautions

Ensure spilled product does not enter drains, sewers, waterways, or confined spaces. Avoid release to the environment.

POWER STEERING FLUID M2716C; M2732C

SDS Preparation Date (mm/dd/yyyy): 03/21/2019

SAFETY DATA SHEET

Methods and material for containment and cleaning up

: Ventilate the area. Prevent further leakage or spillage if safe to do so. Eliminate all ignition sources. Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand). Pick up and transfer to properly labeled containers. Refer to Section 13 for disposal of contaminated material. Contact the proper local authorities.

Page 3 of 8

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

: Use with adequate ventilation. Avoid breathing vapours, fumes, or mists. Wear protective equipment during handling. Avoid contact with skin, eyes and clothing. Keep away from extreme heat and direct flame. 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 a cool, dry, well-ventilated area. Store away from incompatibles and out of direct sunlight. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks.

Incompatible materials : Oxidizing agents

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:							
Chemical Name	Chemical Name ACGIH TLV OSHA PEL						
	<u>TWA</u>	<u>STEL</u>	<u>PEL</u>	STEL			
Lubricating oils (petroleum), hydrotreated spent	5 mg/m³ (As 'Oil mist, mineral') (inhalable)	N/Av	5 mg/m³ (As 'Oil mist, mineral')	N/Av			

Exposure controls

Ventilation and engineering measures

: Use with adequate local or mechanical ventilation to meet TLV requirements.

Respiratory protection : If airbourne concentrations are above the permissible exposure limit or are not known, use

NIOSH-approved respirators. Respirators should be selected based on the form and

concentration of contaminants in air, and in accordance with CSA Z94.4-02.

Skin protection : Gloves impervious to the material are recommended. The suitability for a specific workplace

should be discussed with the producers of the protective gloves. Wear sufficient clothing to

prevent skin contact.

Eye / face protection : Wear as appropriate: Safety glasses with side shields; Tightly fitting safety goggles.

Other protective equipment : An eyewash station and safety shower should be made available in the immediate working

area. Other equipment may be required depending on workplace standards.

General hygiene considerations

: Avoid breathing vapours, fumes, or mists. Avoid contact with skin, eyes and clothing. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove soiled clothing and wash it thoroughly before reuse. Handle in accordance with

good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Amber liquid.Odour: Petroleum odour.

 $\begin{array}{cccc} \textbf{Odour threshold} & : & \text{N/Av} \\ \textbf{pH} & : & \text{N/Ap} \\ \end{array}$

Melting/Freezing point: Melting point: N/Av

Freezing point: N/Av

Initial boiling point and boiling range

: > 129.5°C (265°F)

Flash point : > 165°C (329°F)

POWER STEERING FLUID M2716C; M2732C

Page 4 of 8

SDS Preparation Date (mm/dd/yyyy): 03/21/2019

SAFETY DATA SHEET

Flashpoint (Method) : N/AvEvaporation 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 : < 0.1 mmHg @ 20°C (68°F)

Vapour density : N/Av

Relative density / Specific gravity

: Relative density: 875 kg/m³

Specific Gravity: 0.87

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 : N/Av

Decomposition temperature : N/Av

Viscosity : > 20.5 mm²/sec @ 40°C (104°F)

Volatiles (% by weight) : N/Ap Volatile organic Compounds (VOC's)

: negligible

Absolute pressure of container

: N/Ap

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 : Ensure adequate ventilation, especially in confined areas. Avoid contact with incompatible

materials. Avoid heat and open flame.

Incompatible materials : Oxidizing agents

Hazardous decomposition products

: Not available.

In the event of fire: Refer also to hazardous combustion products, Section 5.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

 $\begin{tabular}{lll} Routes of entry inhalation & : YES \\ Routes of entry skin & eye & : YES \\ Routes of entry Ingestion & : YES \\ Routes of exposure skin absorption \\ \end{tabular}$

: NO

M2716C; M2732C

Page 5 of 8

SAFETY DATA SHEET

Potential Health Effects:

Signs and symptoms of short-term (acute) exposure

Sign and symptoms Inhalation

• Mild respiratory irritant. May cause coughing and breathing difficulties.

Sign and symptoms ingestion

: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Sign and symptoms skin

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

cause temporary redness.

Sign and symptoms eyes

Direct eye contact may cause slight or mild, transient irritation. Symptoms may include

stinging and tearing.

Potential Chronic Health Effects

Prolonged overexposure may cause slight liver effects, such as increased organ weights.

Mutagenicity

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity

Not expected to have carcinogenic effects.

No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

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

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 single or repeated exposures.

Medical conditions aggravated by overexposure

: Pre-existing skin, eye and respiratory 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. See below for individual ingredient acute toxicity data.

	LC₅₀ (4hr)	LD50		
Chemical name	<u>inh, rat</u>	(Oral, rat)	(Rabbit, dermal)	
Lubricating oils (petroleum), hydrotreated spent	> 2.2 mg/L (mist) (No mortality)	> 5000 mg/kg	> 2000 mg/kg (No mortality)	

Other important toxicological hazards

: None known or reported by the manufacturer.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

: Toxic to aquatic life. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters. No data is available on the product itself.

See the following tables for individual ingredient ecotoxicity data.

Ecotoxicity data:

Lu anna d'i annt a	2121	Toxicity to Fish			
<u>Ingredients</u>	CAS No	LC50 / 96h	NOEC / 21 day	M Factor	
Lubricating oils (petroleum), hydrotreated spent	64742-58-1	N/Av	N/Av	None.	

M2716C; M2732C

Page 6 of 8

SAFETY DATA SHEET

<u>Ingredients</u>	CAS No	Тох	icity to Daphnia		
		EC50 / 48h	NOEC / 21 day	M Factor	
Lubricating oils (petroleum), hydrotreated spent	64742-58-1	2.2 mg/L (Daphnia magna) (Read-across)	N/Av	None.	

<u>Ingredients</u>	CAS No	Toxicity to Algae				
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor		
Lubricating oils (petroleum), hydrotreated spent	64742-58-1	N/Av	N/Av	None.		

Persistence and degradability

: No data is available on the product itself.

Contains the following chemicals which are not readily biodegradable: Lubricating oils (petroleum), hydrotreated spent.

Bioaccumulation potential

No data is available on the product itself. See the following data for ingredient information.

<u>Components</u>	Partition coefficient n-octanol/water (log Kow)	Bioconcentration factor (BCF)
Lubricating oils (petroleum), hydrotreated spent (CAS 64742-58-1)	6.5 - 24.2 (estimated)	N/Av

Mobility in soil

: No data is available on the product itself.

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.

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	None.	Not regulated.	Not regulated	None	\otimes
TDG Additional information	None.		1		

Special precautions for user

: Appropriate advice on safety must accompany the package.

Environmental hazards

This product does not meet the criteria for an environmentally hazardous mixture, 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.

SDS Preparation Date (mm/dd/yyyy): 03/21/2019

M2716C; M2732C Page 7 of 8

SAFETY DATA SHEET

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 does not contain any substances listed on the NPRI.

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
Lubricating oils (petroleum), hydrotreated spent	64742-58-1	265-161-3	Present	Present	Not specifically listed.	KE-22626	Present	May be used as a component in a product covered by a group standard, but is not approved for use as a chemical in its own right.

SECTION 16. OTHER INFORMATION

Legend

ACGIH: American Conference of Governmental Industrial Hygienists

AICS: Australian Inventory of Chemical Substances

CAS: Chemical Abstract Services

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

Inh: Inhalation

IOC: Inventory of Chemicals

KECI: 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

OECD: Organisation for Economic Co-operation and Development

NTP: National Toxicology Program

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 TWA: Time Weighted Average

WHMIS: Workplace Hazardous Materials Identification System

Page 8 of 8

SAFETY DATA SHEET

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.
 - Canadian Centre for Occupational Health and Safety, CCInfoWeb 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)

: 03/21/2019

Other special considerations for handling

: Provide adequate information, instruction and training for operators.

Prepared for:

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.

Prepared by:

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