

1. Identification

Product identifier	Two-Stroke Engine Oil		
Other means of identification	0530		
Recommended use	Two-Stroke Engine Oil		
Recommended restrictions	Not for food, drug, or household use.		
Manufacturer/Importer/Supplier/Distributor information			
Manufacturer			
Company name	Nemco Resources Ltd		
Address	25 Midland Street Winnipeg, MB R3E 3J6 Canada		
Telephone	Phone:	204-788-1030	
	Fax:	204-788-1593	
	Toll Free:	855-755-6737 (M-F 8am-4:30pm)	
Website	www.nemco.ca/msds-safety-information		
E-mail	info@nemco.ca		
Emergency phone number	NEMCO:	855-755-6737 (M-F 8am-4:30pm)	
Supplier	See above.		

2. Hazard identification

Physical hazards	Flammable liquids	Category 4
Health hazards	Skin corrosion/irritation	Category 2
	Carcinogenicity	Category 1B
Environmental hazards	Not classified.	

Label elements



Signal word Danger

Hazard statement Combustible liquid. Causes skin irritation. May cause cancer.

Precautionary statement

Prevention 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. Wash thoroughly after handling. Wear protective gloves, protective clothing, eye protection and face protection.

Response In case of fire: Use appropriate media to extinguish.
IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse. Specific treatment (see information on this label).
IF exposed or concerned: Get medical attention.

Storage Store in a well-ventilated place. Store locked up.

Disposal Dispose of container in accordance with local, regional, national and international regulations.

Other hazards None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Distillates (petroleum), hydrodesulphurised middle		64742-80-9	10-30*
Distillates (petroleum), hydrotreated heavy paraffinic		64742-54-7	60-80*
Hydrogen sulphide		7783-06-4	0.1-1*

Chemical name	Common name and synonyms	CAS number	%
Naphthalene		91-20-3	0.1-1*

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments *CANADA GHS: The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
Skin contact	IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Specific treatment (see information on this label). Take off contaminated clothing and wash it before reuse.
Eye contact	Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.
Ingestion	Rinse mouth. Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious or is convulsing. Obtain medical attention.
Most important symptoms/effects, acute and delayed	Dizziness. Direct contact with eyes may cause temporary irritation. Skin irritation. May cause redness and pain.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Symptoms may be delayed.
General information	IF exposed or concerned: Get medical attention. If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire-fighting measures

Suitable extinguishing media	Foam. Dry chemical powder. Water fog. Carbon dioxide.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	The product is combustible, and heating may generate vapours which may form explosive vapour/air mixtures. During fire, gases hazardous to health may be formed.
Hazardous combustion products	May include and are not limited to: Oxides of carbon.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Combustible liquid.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. The product is immiscible with water and will spread on the water surface. Prevent entry into waterways, sewer, basements or confined areas. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water. Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Environmental precautions	Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground. Do not discharge into lakes, streams, ponds or public waters.

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. Keep away from open flames, hot surfaces and sources of ignition. When using do not smoke. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material. When using do not eat or drink.
Conditions for safe storage, including any incompatibilities	Store locked up. Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children.

8. Exposure controls/Personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Distillates (petroleum), hydrodesulphurised middle (CAS 64742-80-9)	TWA	5 mg/m ³	Inhalable fraction.
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)	TWA	5 mg/m ³	Inhalable fraction.
Hydrogen sulphide (CAS 7783-06-4)	STEL	5 ppm	
	TWA	1 ppm	
Naphthalene (CAS 91-20-3)	TWA	10 ppm	

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value	Form
Distillates (petroleum), hydrodesulphurised middle (CAS 64742-80-9)	TWA	1590 mg/m ³	
		400 ppm	
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)	STEL	10 mg/m ³	Mist.
	TWA	5 mg/m ³	Mist.
Hydrogen sulphide (CAS 7783-06-4)	Ceiling	21 mg/m ³	
		15 ppm	
	TWA	14 mg/m ³ 10 ppm	
Naphthalene (CAS 91-20-3)	STEL	79 mg/m ³ 15 ppm	
		52 mg/m ³ 10 ppm	
	TWA	52 mg/m ³ 10 ppm	

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)	TWA	1 mg/m ³	Mist.
Hydrogen sulphide (CAS 7783-06-4)	Ceiling	10 ppm	
Naphthalene (CAS 91-20-3)	TWA	10 ppm	

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value	Form
Distillates (petroleum), hydrodesulphurised middle (CAS 64742-80-9)	TWA	5 mg/m ³	Inhalable fraction.

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value	Form
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)	TWA	5 mg/m3	Inhalable fraction.
Hydrogen sulphide (CAS 7783-06-4)	STEL	5 ppm	
	TWA	1 ppm	
Naphthalene (CAS 91-20-3)	TWA	10 ppm	

Canada - New Brunswick Components

Components	Type	Value	Form
Hydrogen sulphide (CAS 7783-06-4)	STEL	21 mg/m3	
		15 ppm	
	TWA	14 mg/m3	
		10 ppm	

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value	Form
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)	TWA	5 mg/m3	Inhalable fraction.
Hydrogen sulphide (CAS 7783-06-4)	STEL	15 ppm	
	TWA	10 ppm	
Naphthalene (CAS 91-20-3)	TWA	10 ppm	

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

Components	Type	Value	Form
Distillates (petroleum), hydrodesulphurised middle (CAS 64742-80-9)	TWA	1000 mg/m3	
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Hydrogen sulphide (CAS 7783-06-4)	STEL	21 mg/m3	
		15 ppm	
	TWA	14 mg/m3 10 ppm	

Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

Components	Type	Value	Form
Distillates (petroleum), hydrodesulphurised middle (CAS 64742-80-9)	15 minute	500 ppm	
	8 hour	400 ppm	
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)	15 minute	10 mg/m3	
	8 hour	5 mg/m3	
Hydrogen sulphide (CAS 7783-06-4)	15 minute	15 ppm	
	8 hour	10 ppm	
Naphthalene (CAS 91-20-3)	15 minute	15 ppm	
	8 hour	10 ppm	

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines**Canada - Alberta OELs: Skin designation**

Naphthalene (CAS 91-20-3)

Can be absorbed through the skin.

Canada - British Columbia OELs: Skin designation

Naphthalene (CAS 91-20-3) Can be absorbed through the skin.

Canada - Manitoba OELs: Skin designation

Naphthalene (CAS 91-20-3) Danger of cutaneous absorption

Canada - Ontario OELs: Skin designation

Naphthalene (CAS 91-20-3) Can be absorbed through the skin.

Canada - Quebec OELs: Skin designation

Naphthalene (CAS 91-20-3) Can be absorbed through the skin.

Canada - Saskatchewan OELs: Skin designation

Naphthalene (CAS 91-20-3) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Naphthalene (CAS 91-20-3) Danger of cutaneous absorption

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment**Eye/face protection** Wear safety glasses with side shields (or goggles).**Skin protection****Hand protection** Impervious gloves. Confirm with reputable supplier first.**Other** Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. As required by employer code.**Respiratory protection**

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2).

Thermal hazards

Not applicable.

General hygiene considerations

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. When using do not eat or drink.

9. Physical and chemical properties

Appearance	Liquid
Physical state	Liquid.
Form	Liquid.
Colour	Blue
Odour	Mild hydrocarbon
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	> 77.0 °C (> 170.6 °F) Closed cup
Evaporation rate	< 1 (BuAc = 1)
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapour pressure	< 0.13 hPa @ 20°C
Vapour density	Not available.
Relative density	0.87 - 0.88
Solubility(ies)	
Solubility (water)	Insoluble

Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	> 204.44 °C (> 399.99 °F)
Decomposition temperature	Not available.
Viscosity	51.8 cSt @ 40°C
Other information	
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Do not mix with other chemicals.
Incompatible materials	Strong oxidising agents.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	May cause stomach distress, nausea or vomiting.

Symptoms related to the physical, chemical and toxicological characteristics
Dizziness. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity See below.

Components	Species	Test Results
Distillates (petroleum), hydrodesulphurised middle (CAS 64742-80-9)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg, ECHA
<i>Inhalation</i>		
LC50	Rat	4.6 mg/L, 4 Hours, ECHA
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg, ECHA
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 5000 mg/kg, 24 Hours, ECHA
<i>Inhalation</i>		
LC50	Rat	> 5.2 mg/L, 4 Hours, ECHA
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg, ECHA
Hydrogen sulphide (CAS 7783-06-4)		
Acute		
<i>Dermal</i>		
LD50	Rat	124 mg/kg, ECHA
<i>Inhalation</i>		
LC50	Rat	621 mg/m ³ , ECHA
<i>Oral</i>		
LD50	Rat	49 mg/kg, ECHA

Components	Species	Test Results
Naphthalene (CAS 91-20-3)		
Acute		
<i>Inhalation</i>		
LC50	Rat	> 0.4 mg/L, 4 Hours, ECHA
<i>Oral</i>		
LD50	Rat	> 2000 mg/kg, ECHA
Skin corrosion/irritation	Causes skin irritation.	
Exposure minutes	Not available.	
Erythema value	Not available.	
Oedema value	Not available.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.	
Corneal opacity value	Not available.	
Iris lesion value	Not available.	
Conjunctival reddening value	Not available.	
Conjunctival oedema value	Not available.	
Recover days	Not available.	
Respiratory or skin sensitisation		
Respiratory sensitisation	Not a respiratory sensitizer.	
Skin sensitisation	This product is not expected to cause skin sensitisation.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	May cause cancer. See below.	
ACGIH Carcinogens		
Distillates (petroleum), hydrodesulphurised middle (CAS 64742-80-9)	A2 Suspected human carcinogen.	
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)	A2 Suspected human carcinogen.	
Naphthalene (CAS 91-20-3)	A3 Confirmed animal carcinogen with unknown relevance to humans.	
Canada - Manitoba OELs: carcinogenicity		
Distillates (petroleum), hydrodesulphurised middle (CAS 64742-80-9)	Suspected human carcinogen.	
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)	Suspected human carcinogen.	
Naphthalene (CAS 91-20-3)	Confirmed animal carcinogen with unknown relevance to humans.	
Canada - Quebec OELs: Carcinogen category		
Naphthalene (CAS 91-20-3)	Detected carcinogenic effect in animals.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)	Volume 33, Supplement 7 - 3 Not classifiable as to carcinogenicity to humans.	
Naphthalene (CAS 91-20-3)	Volume 82 - 2B Possibly carcinogenic to humans.	
Reproductive toxicity	Not applicable.	
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not an aspiration hazard.	
Chronic effects	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.	
Further information	Not available.	

12. Ecological information

Ecotoxicity See below

Ecotoxicological data

Components	Species		Test Results
Distillates (petroleum), hydrodesulphurised middle (CAS 64742-80-9)			
Aquatic			
Crustacea	EC50	Water flea (<i>Daphnia pulex</i>)	2.7 - 5.1 mg/L, 48 hours
Fish	LC50	Rainbow trout, donaldson trout (<i>Oncorhynchus mykiss</i>)	8.8 mg/L, 96 hours
			8.8 mg/L, 96 hours
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)			
Crustacea	EC50	Daphnia	1000 mg/L, 48 Hours
Hydrogen sulphide (CAS 7783-06-4)			
Aquatic			
Fish	LC50	Bluegill (<i>Lepomis macrochirus</i>)	0.009 mg/L, 96 hours
Naphthalene (CAS 91-20-3)			
Algae	IC50	Algae	0.4 mg/L, 72 Hours
Crustacea	EC50	Daphnia	2.16 mg/L, 48 Hours
Aquatic			
Crustacea	EC50	Water flea (<i>Daphnia magna</i>)	1.09 - 3.4 mg/L, 48 hours
Fish	LC50	Pink salmon (<i>Oncorhynchus gorbuscha</i>)	1.11 - 1.68 mg/L, 96 hours
Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.		
Bioaccumulative potential			
Mobility in soil	No data available.		
Mobility in general	Not available.		
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.		

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

General	Canada: TDG Proof of Classification: Classification Method: Classified as per Part 2, Sections 2.1 – 2.8 of the Transportation of Dangerous Goods Regulations. If applicable, the technical name and the classification of the product will appear below.
Transportation of Dangerous Goods (TDG - Canada)	Not regulated as dangerous goods.

15. Regulatory information

Canadian federal regulations	This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.	
Canada CEPA Schedule I: Listed substance	Naphthalene (CAS 91-20-3)	Listed.
Canada DSL Challenge Substances: Listed substance	Naphthalene (CAS 91-20-3)	Listed
Canada NPRI VOCs with Additional Reporting Requirements: Mass reporting threshold/Identification Number	Distillates (petroleum), hydrodesulphurised middle (CAS 64742-80-9)	1 TONNES
Export Control List (CEPA 1999, Schedule 3)	Not listed.	

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

WHMIS status Hazardous**International regulations****Inventory status**

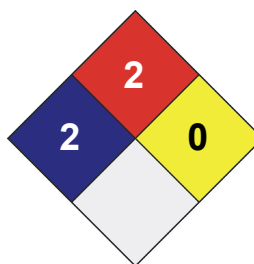
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	* 2
FLAMMABILITY	2
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X

**Issue date** 09-December-2021**Revision date** 09-December-2021**Version No.** 01**Other information** For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.

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