

1. Product and Company Identification

Product identifier	Marine LCX 4050
Other means of identification	Not available
Recommended use	Lubricant
Recommended restrictions	None known.
Manufacturer information	Irving Blending & Packaging PO Box 1169 Saint John, NB E2L 4E6 CA Phone: 1.800.574.5823 Emergency Phone: 1.506.648.3060
Supplier	See above.

2. Hazards Identification

Physical hazards	Not classified.	
Health hazards	Sensitization, skin	Category 1
	Reproductive toxicity	Category 2
	Specific target organ toxicity, repeated exposure	Category 1
Environmental hazards	Not classified.	
WHMIS 2015 defined hazards	Not classified	
Label elements		



Signal word Danger

Hazard statement Causes damage to organs through prolonged or repeated exposure. Suspected of damaging fertility or the unborn child. May cause an allergic skin reaction.

Precautionary statement

Prevention	Avoid breathing mist or vapor. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.
Response	IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see information on this label). Take off contaminated clothing and wash it before reuse. IF exposed or concerned: Get medical advice/attention. Get medical advice/attention if you feel unwell.
Storage	Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.

WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC) None known

WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC) None known

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/Information on Ingredients

Mixture

Chemical name	Common name and synonyms	CAS number	%
Paraffin Oils (petroleum), Catalytic Dewaxed Heavy		64742-70-7	60-100

Chemical name	Common name and synonyms	CAS number	%
Distillates (petroleum), Clay-treated Light Naphthenic		64742-45-6	5-10
Distillates (petroleum), hydrotreated heavy naphthenic		64742-52-5	5-10
Distillates (petroleum), hydrotreated heavy paraffinic		64742-54-7	5-10
Distillates (petroleum), hydrotreated light naphthenic		64742-53-6	5-10
Distillates (petroleum), hydrotreated light paraffinic		64742-55-8	5-10
Distillates (petroleum), solvent refined light naphthenic		64741-97-5	5-10
Distillates (petroleum), Solvent-dewaxed Heavy Naphthenic		64742-63-8	5-10
Distillates (petroleum), solvent-dewaxed heavy paraffin		64742-65-0	5-10
Distillates (petroleum), Solvent-dewaxed Light Naphthenic		64742-64-9	5-10
Distillates (petroleum), solvent-refined heavy naphthenic		64741-96-4	5-10
Distillates (petroleum), solvent-refined heavy paraffinic		64741-88-4	5-10
Distillates (petroleum), solvent-refined light paraffinic		64741-89-5	5-10
Distillates, petroleum, clay-treated heavy naphthenic		64742-44-5	5-10
Lubricating oils (A complex combination of hydrocarbons obtained from solvent extraction and dewaxing processes. It consists predominantly of saturated hydrocarbons having carbon numbers in the range C15 through C50.)		74869-22-0	5-10
Lubricating Oils (petroleum), C>25, Solvent-extd., Deasphalted, Dewaxed, Hydrogenated		101316-69-2	5-10
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based		72623-86-0	5-10
Lubricating Oils (petroleum), C17-32, Solvent-extd., Dewaxed, Hydrogenated		101316-70-5	5-10
Lubricating Oils (petroleum), C20-35, Solvent-extd., Dewaxed, Hydrogenated		101316-71-6	5-10
Lubricating Oils (petroleum), C24-50, Solvent-extd., Dewaxed, Hydrogenated		101316-72-7	5-10
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based		72623-87-1	5-10
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based, high-viscosity		72623-85-9	5-10
Lubricating oils, petroleum, hydrotreated spent		64742-58-1	5-10
Petroleum distillates, solvent dewaxed light paraffinic		64742-56-9	5-10
Residual oils (petroleum), hydrotreated		64742-57-0	5-10
Residual Oils (petroleum), Hydrotreated Solvent Dewaxed		90669-74-2	5-10
Residual Oils (petroleum), Solvent Deasphalted		64741-95-3	5-10

Chemical name	Common name and synonyms	CAS number	%
Residual oils (Petroleum), solvent-dewaxed		64742-62-7	5-10
Residual oils (petroleum), solvent-refined		64742-01-4	5-10
Phenol, Dodecyl-, Branched		121158-58-5	2
Tetrapropenyl Phenol		74499-35-7	2
Benzenesulfonic Acid, C10-16-alkyl Derivs., Calcium Salts		68584-23-6	0.5
Sulfonic acids, petroleum, calcium salts		61789-86-4	0.5

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

Composition comments ** The base oil may be a mixture of the above-mentioned CAS numbers

4. First Aid Measures

Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
Skin contact	IF ON SKIN: Wash with plenty of water. If skin irritation or rash 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. If ingestion of a large amount does occur, call a poison control center immediately.
Most important symptoms/effects, acute and delayed	Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. IF exposed or concerned: Get medical advice/attention.

5. Fire Fighting Measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. 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	During fire, gases hazardous to health may be formed.
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	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	No unusual fire or explosion hazards noted.
Hazardous combustion products	May include and are not limited to: Oxides of sulfur. Oxides of carbon.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep out of low areas. Keep people away from and upwind of spill/leak. 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	Stop the flow of material, if this is without risk. Large Spills: Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

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. Avoid contact during pregnancy/while nursing. Avoid contact with eyes, skin and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Use personal protective equipment as required. When using, do not eat, drink or smoke. Wash hands thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Store locked up. Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure Controls/Personal Protection

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

Components	Type	Value	Form
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Distillates (petroleum), solvent refined light naphthenic (CAS 64741-97-5)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Distillates (petroleum), solvent-dewaxed heavy paraffin (CAS 64742-65-0)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Distillates (petroleum), Solvent-dewaxed Light Naphthenic (CAS 64742-64-9)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Distillates (petroleum), solvent-refined light paraffinic (CAS 64741-89-5)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.

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

Components	Type	Value	Form
Petroleum distillates, solvent dewaxed light paraffinic (CAS 64742-56-9)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Residual oils (petroleum), hydrotreated (CAS 64742-57-0)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.

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), Clay-treated Light Naphthenic (CAS 64742-45-6)	TWA	0.2 mg/m3	Mist.
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)	TWA	1 mg/m3	Mist.
Distillates (petroleum), solvent-dewaxed heavy paraffin (CAS 64742-65-0)	TWA	1 mg/m3	Mist.
Distillates (petroleum), Solvent-dewaxed Light Naphthenic (CAS 64742-64-9)	TWA	0.2 mg/m3	Mist.
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (CAS 72623-86-0)	TWA	1 mg/m3	Mist.
Lubricating Oils (petroleum), C17-32, Solvent-extd., Dewaxed, Hydrogenated (CAS 101316-70-5)	TWA	0.2 mg/m3	Mist.
Lubricating Oils (petroleum), C20-35, Solvent-extd., Dewaxed, Hydrogenated (CAS 101316-71-6)	TWA	0.2 mg/m3	Mist.
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based (CAS 72623-87-1)	TWA	1 mg/m3	Mist.
Residual oils (petroleum), hydrotreated (CAS 64742-57-0)	TWA	1 mg/m3	Mist.

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

Components	Type	Value	Form
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	TWA	5 mg/m3	Inhalable fraction.
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)	TWA	5 mg/m3	Inhalable fraction.
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)	TWA	5 mg/m3	Inhalable fraction.

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

Components	Type	Value	Form
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)	TWA	5 mg/m3	Inhalable fraction.
Distillates (petroleum), solvent refined light naphthenic (CAS 64741-97-5)	TWA	5 mg/m3	Inhalable fraction.
Distillates (petroleum), solvent-dewaxed heavy paraffin (CAS 64742-65-0)	TWA	5 mg/m3	Inhalable fraction.
Distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4)	TWA	5 mg/m3	Inhalable fraction.
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	TWA	5 mg/m3	Inhalable fraction.
Distillates (petroleum), solvent-refined light paraffinic (CAS 64741-89-5)	TWA	5 mg/m3	Inhalable fraction.
Distillates, petroleum, clay-treated heavy naphthenic (CAS 64742-44-5)	TWA	5 mg/m3	Inhalable fraction.
Lubricating oils (A complex combination of hydrocarbons obtained from solvent extraction and dewaxing processes. It consists predominantly of saturated hydrocarbons having carbon numbers in the range C15 through C50.) (CAS 74869-22-0)	TWA	5 mg/m3	Inhalable fraction.
Lubricating Oils (petroleum), C>25, Solvent-extd., Deasphalted, Dewaxed, Hydrogenated (CAS 101316-69-2)	TWA	5 mg/m3	Inhalable fraction.
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (CAS 72623-86-0)	TWA	5 mg/m3	Inhalable fraction.
Lubricating Oils (petroleum), C24-50, Solvent-extd., Dewaxed, Hydrogenated (CAS 101316-72-7)	TWA	5 mg/m3	Inhalable fraction.
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based (CAS 72623-87-1)	TWA	5 mg/m3	Inhalable fraction.
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based, high-viscosity (CAS 72623-85-9)	TWA	5 mg/m3	Inhalable fraction.
Lubricating oils, petroleum, hydrotreated spent (CAS 64742-58-1)	TWA	5 mg/m3	Inhalable fraction.
Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7)	TWA	5 mg/m3	Inhalable fraction.
Petroleum distillates, solvent dewaxed light paraffinic (CAS 64742-56-9)	TWA	5 mg/m3	Inhalable fraction.

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

Components	Type	Value	Form
Residual oils (petroleum), hydrotreated (CAS 64742-57-0)	TWA	5 mg/m3	Inhalable fraction.
Residual Oils (petroleum), Solvent Deasphalted (CAS 64741-95-3)	TWA	5 mg/m3	Inhalable fraction.
Residual oils (Petroleum), solvent-dewaxed (CAS 64742-62-7)	TWA	5 mg/m3	Inhalable fraction.
Residual oils (petroleum), solvent-refined (CAS 64742-01-4)	TWA	5 mg/m3	Inhalable fraction.

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.
Distillates (petroleum), Solvent-dewaxed Light Naphthenic (CAS 64742-64-9)	TWA	5 mg/m3	Inhalable fraction.
Distillates, petroleum, clay-treated heavy naphthenic (CAS 64742-44-5)	TWA	5 mg/m3	Inhalable fraction.
Lubricating oils (A complex combination of hydrocarbons obtained from solvent extraction and dewaxing processes. It consists predominantly of saturated hydrocarbons having carbon numbers in the range C15 through C50.) (CAS 74869-22-0)	TWA	5 mg/m3	Inhalable fraction.
Lubricating Oils (petroleum), C>25, Solvent-extd., Deasphalted, Dewaxed, Hydrogenated (CAS 101316-69-2)	TWA	5 mg/m3	Inhalable fraction.
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (CAS 72623-86-0)	TWA	5 mg/m3	Inhalable fraction.
Lubricating Oils (petroleum), C24-50, Solvent-extd., Dewaxed, Hydrogenated (CAS 101316-72-7)	TWA	5 mg/m3	Inhalable fraction.
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based (CAS 72623-87-1)	TWA	5 mg/m3	Inhalable fraction.
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based, high-viscosity (CAS 72623-85-9)	TWA	5 mg/m3	Inhalable fraction.
Lubricating oils, petroleum, hydrotreated spent (CAS 64742-58-1)	TWA	5 mg/m3	Inhalable fraction.
Residual Oils (petroleum), Solvent Deasphalted (CAS 64741-95-3)	TWA	5 mg/m3	Inhalable fraction.

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

Components	Type	Value	Form
Residual oils (Petroleum), solvent-dewaxed (CAS 64742-62-7)	TWA	5 mg/m3	Inhalable fraction.
Residual oils (petroleum), solvent-refined (CAS 64742-01-4)	TWA	5 mg/m3	Inhalable fraction.

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value	Form
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Distillates (petroleum), solvent refined light naphthenic (CAS 64741-97-5)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Distillates (petroleum), solvent-dewaxed heavy paraffin (CAS 64742-65-0)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Distillates (petroleum), Solvent-dewaxed Light Naphthenic (CAS 64742-64-9)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Distillates (petroleum), solvent-refined light paraffinic (CAS 64741-89-5)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Petroleum distillates, solvent dewaxed light paraffinic (CAS 64742-56-9)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Residual oils (petroleum), hydrotreated (CAS 64742-57-0)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	PEL	5 mg/m3	Mist.
		2000 mg/m3 500 ppm	
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)	PEL	5 mg/m3	Mist.
		2000 mg/m3 500 ppm	
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)	PEL	5 mg/m3	Mist.
Distillates (petroleum), solvent refined light naphthenic (CAS 64741-97-5)	PEL	5 mg/m3	Mist.
Distillates (petroleum), solvent-dewaxed heavy paraffin (CAS 64742-65-0)	PEL	5 mg/m3	Mist.
		2000 mg/m3 500 ppm	
Distillates (petroleum), Solvent-dewaxed Light Naphthenic (CAS 64742-64-9)	PEL	5 mg/m3	Mist.
Distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4)	PEL	5 mg/m3	Mist.
		2000 mg/m3 500 ppm	
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	PEL	5 mg/m3	Mist.
		2000 mg/m3 500 ppm	
Distillates (petroleum), solvent-refined light paraffinic (CAS 64741-89-5)	PEL	5 mg/m3	Mist.
Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7)	PEL	5 mg/m3	Mist.
Petroleum distillates, solvent dewaxed light paraffinic (CAS 64742-56-9)	PEL	5 mg/m3	Mist.
Residual oils (petroleum), hydrotreated (CAS 64742-57-0)	PEL	5 mg/m3	Mist.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	TWA	5 mg/m3	Inhalable fraction.
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)	TWA	5 mg/m3	Inhalable fraction.
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)	TWA	5 mg/m3	Inhalable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)	TWA	5 mg/m3	Inhalable fraction.
Distillates (petroleum), solvent refined light naphthenic (CAS 64741-97-5)	TWA	5 mg/m3	Inhalable fraction.
Distillates (petroleum), solvent-dewaxed heavy paraffin (CAS 64742-65-0)	TWA	5 mg/m3	Inhalable fraction.
Distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4)	TWA	5 mg/m3	Inhalable fraction.
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	TWA	5 mg/m3	Inhalable fraction.
Distillates (petroleum), solvent-refined light paraffinic (CAS 64741-89-5)	TWA	5 mg/m3	Inhalable fraction.
Distillates, petroleum, clay-treated heavy naphthenic (CAS 64742-44-5)	TWA	5 mg/m3	Inhalable fraction.
Lubricating oils (A complex combination of hydrocarbons obtained from solvent extraction and dewaxing processes. It consists predominantly of saturated hydrocarbons having carbon numbers in the range C15 through C50.) (CAS 74869-22-0)	TWA	5 mg/m3	Inhalable fraction.
Lubricating Oils (petroleum), C>25, Solvent-extd., Deasphalted, Dewaxed, Hydrogenated (CAS 101316-69-2)	TWA	5 mg/m3	Inhalable fraction.
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (CAS 72623-86-0)	TWA	5 mg/m3	Inhalable fraction.
Lubricating Oils (petroleum), C24-50, Solvent-extd., Dewaxed, Hydrogenated (CAS 101316-72-7)	TWA	5 mg/m3	Inhalable fraction.
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based (CAS 72623-87-1)	TWA	5 mg/m3	Inhalable fraction.
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based, high-viscosity (CAS 72623-85-9)	TWA	5 mg/m3	Inhalable fraction.
Lubricating oils, petroleum, hydrotreated spent (CAS 64742-58-1)	TWA	5 mg/m3	Inhalable fraction.
Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7)	TWA	5 mg/m3	Inhalable fraction.
Petroleum distillates, solvent dewaxed light paraffinic (CAS 64742-56-9)	TWA	5 mg/m3	Inhalable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Residual oils (petroleum), hydrotreated (CAS 64742-57-0)	TWA	5 mg/m3	Inhalable fraction.
Residual Oils (petroleum), Solvent Deasphalted (CAS 64741-95-3)	TWA	5 mg/m3	Inhalable fraction.
Residual oils (Petroleum), solvent-dewaxed (CAS 64742-62-7)	TWA	5 mg/m3	Inhalable fraction.
Residual oils (petroleum), solvent-refined (CAS 64742-01-4)	TWA	5 mg/m3	Inhalable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	Ceiling	1800 mg/m3	
	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)	Ceiling	1800 mg/m3	
	STEL	10 mg/m3	Mist.
	STEL	10 mg/m3	Mist.
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)	TWA	5 mg/m3	Mist.
	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Distillates (petroleum), solvent refined light naphthenic (CAS 64741-97-5)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
	Ceiling	1800 mg/m3	
Distillates (petroleum), solvent-dewaxed heavy paraffin (CAS 64742-65-0)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
	STEL	10 mg/m3	Mist.
Distillates (petroleum), Solvent-dewaxed Light Naphthenic (CAS 64742-64-9)	TWA	5 mg/m3	Mist.
	Ceiling	1800 mg/m3	
	STEL	10 mg/m3	Mist.
Distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4)	Ceiling	1800 mg/m3	
	STEL	10 mg/m3	Mist.
	STEL	10 mg/m3	Mist.
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	Ceiling	1800 mg/m3	
	STEL	10 mg/m3	Mist.
	STEL	10 mg/m3	Mist.
Distillates (petroleum), solvent-refined light paraffinic (CAS 64741-89-5)	TWA	5 mg/m3	Mist.
	STEL	10 mg/m3	Mist.
	STEL	10 mg/m3	Mist.
Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.

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Components	Type	Value	Form
Petroleum distillates, solvent dewaxed light paraffinic (CAS 64742-56-9)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Residual oils (petroleum), hydrotreated (CAS 64742-57-0)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.

Biological limit values

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

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**

Chemical goggles are recommended.

Skin protection**Hand protection**

Wear protective gloves.

Other

Wear appropriate chemical resistant clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Not applicable.

General hygiene considerations

When using, do not eat, drink or 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.

9. Physical and Chemical Properties

Appearance	Liquid
Physical state	Liquid.
Form	Liquid.
Color	Dark brown
Odor	Mild petroleum
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	> 500 °F (> 260 °C)
Pour point	Not available.
Specific gravity	0.921 @ 15°C
Partition coefficient (n-octanol/water)	Not available.
Flash point	438.8 °F (226.0 °C) Pensky-Martens Closed Cup
Evaporation rate	Not available.
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.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	Negligible
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.

Viscosity 236.8 cSt @ 40°C

Other information

Percent volatile Negligible

10. Stability and Reactivity

Reactivity This product may react with strong oxidizing agents.
Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.
Chemical stability Material is stable under normal conditions.
Conditions to avoid Avoid temperatures exceeding the flash point.
Incompatible materials Strong oxidizing agents.
Hazardous decomposition products May include and are not limited to: Oxides of carbon. Oxides of sulfur.

11. Toxicological Information

Routes of exposure Inhalation. Ingestion. Skin contact. Eye contact.

Information on likely routes of exposure

Ingestion Expected to be a low ingestion hazard.
Inhalation Prolonged inhalation may be harmful.
Skin contact May cause sensitization by skin contact.
Eye contact May cause irritation.

Symptoms related to the physical, chemical and toxicological characteristics Symptoms may include stomach distress, nausea or vomiting.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
Benzenesulfonic Acid, C10-16-alkyl Derivs., Calcium Salts (CAS 68584-23-6)		
Acute		
<i>Dermal</i>		
LD50	Rat	> 2000 mg/kg, ECHA
<i>Inhalation</i>		
LC50	Rat	> 1.9 mg/l/4h, ECHA
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg, ECHA
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 5000 mg/kg
<i>Inhalation</i>		
LC50	Rat	> 5 mg/l/4h
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg
<i>Inhalation</i>		
LC50	Not available	
<i>Oral</i>		
LD50	Rat	5000 mg/kg
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg

Components	Species	Test Results
<i>Inhalation</i>		
LC50	Rat	2.2 mg/l/4h
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg
<i>Inhalation</i>		
LC50	Rat	2.2 mg/l/4h
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg
Distillates (petroleum), solvent refined light naphthenic (CAS 64741-97-5)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	2000 mg/kg
<i>Inhalation</i>		
LC50	Rat	2.2 mg/l/4h
<i>Oral</i>		
LD50	Rat	5000 mg/kg
Distillates (petroleum), solvent-dewaxed heavy paraffin (CAS 64742-65-0)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	>= 5000 mg/kg
<i>Inhalation</i>		
LC50	Rat	2.2 mg/l/4h
<i>Oral</i>		
LD50	Rat	>= 5000 mg/kg
Distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 5000 mg/kg
<i>Inhalation</i>		
LC50	Not available	
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	2000 mg/kg
<i>Inhalation</i>		
LC50	Rat	>= 2.2 mg/l/4h
<i>Oral</i>		
LD50	Rat	5000 mg/kg
Distillates (petroleum), solvent-refined light paraffinic (CAS 64741-89-5)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 5000 mg/kg
<i>Inhalation</i>		
LC50	Rat	> 5 mg/l/4h 4000 mg/m3, 4 Hours

Components	Species	Test Results
<i>Oral</i> LD50	Rat	> 5000 mg/kg 30000 mg/kg
Lubricating oils (A complex combination of hydrocarbons obtained from solvent extraction and dewaxing processes. It consists predominantly of saturated hydrocarbons having carbon numbers in the range C15 through C50.) (CAS 74869-22-0)		
Acute		
<i>Dermal</i> LD50	Rat	2000 mg/kg
<i>Inhalation</i> LC50	Rat	2.2 mg/l/4h
<i>Oral</i> LD50	Rat	5000 mg/kg
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (CAS 72623-86-0)		
Acute		
<i>Dermal</i> LD50	Rabbit	> 2000 mg/kg
<i>Inhalation</i> LC50	Rat	> 5.2 mg/l/4h
<i>Oral</i> LD50	Rat	> 5000 mg/kg
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based (CAS 72623-87-1)		
Acute		
<i>Dermal</i> LD50	Rabbit	> 2000 mg/kg
<i>Inhalation</i> LC50	Rat	> 5.2 mg/L, 4 hours, dust/mist
<i>Oral</i> LD50	Rat	> 5000 mg/kg
Lubricating oils, petroleum, hydrotreated spent (CAS 64742-58-1)		
Acute		
<i>Dermal</i> LD50	Rabbit	> 4480 mg/kg
	Rat	> 2000 mg/kg
<i>Oral</i> LD50	Rat	> 2000 mg/kg
Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7)		
Acute		
<i>Inhalation</i> LC50	Not available	
<i>Oral</i> LD50	Not available	
Phenol, Dodecyl-, Branched (CAS 121158-58-5)		
Acute		
<i>Dermal</i> LD50	Rabbit	> 15000 mg/kg
<i>Oral</i> LD50	Rat	2100 mg/kg, ECHA
Residual oils (petroleum), hydrotreated (CAS 64742-57-0)		
Acute		
<i>Dermal</i> LD50	Not available	
<i>Inhalation</i> LC50	Not available	

Components	Species	Test Results
<i>Oral</i> LD50	Rat	> 5000 mg/kg
Residual Oils (petroleum), Solvent Deasphalted (CAS 64741-95-3)		
Acute		
<i>Inhalation</i> LC50	Not available	
<i>Oral</i> LD50	Not available	
Residual oils (Petroleum), solvent-dewaxed (CAS 64742-62-7)		
Acute		
<i>Dermal</i> LD50	Rat	> 2000 mg/kg
<i>Inhalation</i> LC50	Rat	> 2180 mg/m3, 4 hours 2 mg/l/4h
<i>Oral</i> LD50	Rat	> 5000 mg/kg
Residual oils (petroleum), solvent-refined (CAS 64742-01-4)		
Acute		
<i>Dermal</i> LD50	Rabbit	> 2000 mg/kg
<i>Inhalation</i> LC50	Not available	
<i>Oral</i> LD50	Rat	15000 mg/kg
Sulfonic acids, petroleum, calcium salts (CAS 61789-86-4)		
Acute		
<i>Dermal</i> LD50	Rabbit	> 4000 mg/kg
<i>Inhalation</i> LC50	Rat	> 1.9 mg/l/4h, ECHA
<i>Oral</i> LD50	Rat	> 5000 mg/kg
Tetrapropenyl Phenol (CAS 74499-35-7)		
Acute		
<i>Inhalation</i> LC50	Not available	
<i>Oral</i> LD50	Not available	
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Exposure minutes	Not available.	
Erythema value	Not available.	
Oedema value	Not available.	
Serious eye damage/eye irritation	May cause 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 sensitization		
Respiratory sensitization	Not available.	

Skin sensitization	May cause an allergic skin reaction.
Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Contains < 3% (w/w) DMSO-extract

ACGIH Carcinogens

Distillates (petroleum), Clay-treated Light Naphthenic (CAS 64742-45-6)	A2 Suspected human carcinogen.
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)	A2 Suspected human carcinogen.
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)	A2 Suspected human carcinogen.
Distillates (petroleum), solvent refined light naphthenic (CAS 64741-97-5)	A2 Suspected human carcinogen.
Distillates (petroleum), Solvent-dewaxed Light Naphthenic (CAS 64742-64-9)	A2 Suspected human carcinogen.
Distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4)	A2 Suspected human carcinogen.
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	A2 Suspected human carcinogen.
Distillates (petroleum), solvent-refined light paraffinic (CAS 64741-89-5)	A2 Suspected human carcinogen.
Distillates, petroleum, clay-treated heavy naphthenic (CAS 64742-44-5)	A2 Suspected human carcinogen.
Lubricating oils (A complex combination of hydrocarbons obtained from solvent extraction and dewaxing processes. It consists predominantly of saturated hydrocarbons having carbon numbers in the range C15 through C50.) (CAS 74869-22-0)	A2 Suspected human carcinogen.
Lubricating Oils (petroleum), C>25, Solvent-extd., Deasphalted, Dewaxed, Hydrogenated (CAS 101316-69-2)	A2 Suspected human carcinogen.
Lubricating Oils (petroleum), C17-32, Solvent-extd., Dewaxed, Hydrogenated (CAS 101316-70-5)	A2 Suspected human carcinogen.
Lubricating Oils (petroleum), C20-35, Solvent-extd., Dewaxed, Hydrogenated (CAS 101316-71-6)	A2 Suspected human carcinogen.
Lubricating Oils (petroleum), C24-50, Solvent-extd., Dewaxed, Hydrogenated (CAS 101316-72-7)	A2 Suspected human carcinogen.
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based, high-viscosity (CAS 72623-85-9)	A2 Suspected human carcinogen.
Lubricating oils, petroleum, hydrotreated spent (CAS 64742-58-1)	A2 Suspected human carcinogen.
Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7)	A2 Suspected human carcinogen.
Petroleum distillates, solvent dewaxed light paraffinic (CAS 64742-56-9)	A2 Suspected human carcinogen.
Residual Oils (petroleum), Solvent Deasphalted (CAS 64741-95-3)	A2 Suspected human carcinogen.
Residual oils (Petroleum), solvent-dewaxed (CAS 64742-62-7)	A2 Suspected human carcinogen.
Residual oils (petroleum), solvent-refined (CAS 64742-01-4)	A2 Suspected human carcinogen.

Canada - Manitoba OELs: carcinogenicity

MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, POORLY AND MILDLY REFINED (CAS 101316-69-2)	Suspected human carcinogen.
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, POORLY AND MILDLY REFINED (CAS 101316-70-5)	Suspected human carcinogen.
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, POORLY AND MILDLY REFINED (CAS 101316-71-6)	Suspected human carcinogen.
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, POORLY AND MILDLY REFINED (CAS 101316-72-7)	Suspected human carcinogen.
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, POORLY AND MILDLY REFINED (CAS 64741-88-4)	Suspected human carcinogen.
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, POORLY AND MILDLY REFINED (CAS 64741-89-5)	Suspected human carcinogen.
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, POORLY AND MILDLY REFINED (CAS 64741-95-3)	Suspected human carcinogen.
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, POORLY AND MILDLY REFINED (CAS 64741-96-4)	Suspected human carcinogen.
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, POORLY AND MILDLY REFINED (CAS 64741-97-5)	Suspected human carcinogen.

MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Suspected human carcinogen.
POORLY AND MILDLY REFINED (CAS 64742-01-4)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Suspected human carcinogen.
POORLY AND MILDLY REFINED (CAS 64742-44-5)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Suspected human carcinogen.
POORLY AND MILDLY REFINED (CAS 64742-45-6)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Suspected human carcinogen.
POORLY AND MILDLY REFINED (CAS 64742-52-5)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Suspected human carcinogen.
POORLY AND MILDLY REFINED (CAS 64742-53-6)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Suspected human carcinogen.
POORLY AND MILDLY REFINED (CAS 64742-55-8)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Suspected human carcinogen.
POORLY AND MILDLY REFINED (CAS 64742-56-9)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Suspected human carcinogen.
POORLY AND MILDLY REFINED (CAS 64742-58-1)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Suspected human carcinogen.
POORLY AND MILDLY REFINED (CAS 64742-62-7)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Suspected human carcinogen.
POORLY AND MILDLY REFINED (CAS 64742-64-9)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Suspected human carcinogen.
POORLY AND MILDLY REFINED (CAS 64742-65-0)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Suspected human carcinogen.
POORLY AND MILDLY REFINED (CAS 64742-70-7)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Suspected human carcinogen.
POORLY AND MILDLY REFINED (CAS 72623-85-9)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Suspected human carcinogen.
POORLY AND MILDLY REFINED (CAS 74869-22-0)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Not classifiable as a human carcinogen.
PURE, HIGHLY AND SEVERELY REFINED,
INHALABLE FRACTION (CAS 101316-69-2)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Not classifiable as a human carcinogen.
PURE, HIGHLY AND SEVERELY REFINED,
INHALABLE FRACTION (CAS 101316-72-7)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Not classifiable as a human carcinogen.
PURE, HIGHLY AND SEVERELY REFINED,
INHALABLE FRACTION (CAS 64741-88-4)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Not classifiable as a human carcinogen.
PURE, HIGHLY AND SEVERELY REFINED,
INHALABLE FRACTION (CAS 64741-89-5)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Not classifiable as a human carcinogen.
PURE, HIGHLY AND SEVERELY REFINED,
INHALABLE FRACTION (CAS 64741-95-3)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Not classifiable as a human carcinogen.
PURE, HIGHLY AND SEVERELY REFINED,
INHALABLE FRACTION (CAS 64741-96-4)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Not classifiable as a human carcinogen.
PURE, HIGHLY AND SEVERELY REFINED,
INHALABLE FRACTION (CAS 64741-97-5)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Not classifiable as a human carcinogen.
PURE, HIGHLY AND SEVERELY REFINED,
INHALABLE FRACTION (CAS 64742-01-4)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Not classifiable as a human carcinogen.
PURE, HIGHLY AND SEVERELY REFINED,
INHALABLE FRACTION (CAS 64742-44-5)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Not classifiable as a human carcinogen.
PURE, HIGHLY AND SEVERELY REFINED,
INHALABLE FRACTION (CAS 64742-52-5)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Not classifiable as a human carcinogen.
PURE, HIGHLY AND SEVERELY REFINED,
INHALABLE FRACTION (CAS 64742-53-6)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Not classifiable as a human carcinogen.
PURE, HIGHLY AND SEVERELY REFINED,
INHALABLE FRACTION (CAS 64742-54-7)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Not classifiable as a human carcinogen.
PURE, HIGHLY AND SEVERELY REFINED,
INHALABLE FRACTION (CAS 64742-55-8)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Not classifiable as a human carcinogen.
PURE, HIGHLY AND SEVERELY REFINED,
INHALABLE FRACTION (CAS 64742-56-9)
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Not classifiable as a human carcinogen.
PURE, HIGHLY AND SEVERELY REFINED,
INHALABLE FRACTION (CAS 64742-57-0)

MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Not classifiable as a human carcinogen.
 PURE, HIGHLY AND SEVERELY REFINED,
 INHALABLE FRACTION (CAS 64742-58-1)
 MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Not classifiable as a human carcinogen.
 PURE, HIGHLY AND SEVERELY REFINED,
 INHALABLE FRACTION (CAS 64742-62-7)
 MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Not classifiable as a human carcinogen.
 PURE, HIGHLY AND SEVERELY REFINED,
 INHALABLE FRACTION (CAS 64742-65-0)
 MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Not classifiable as a human carcinogen.
 PURE, HIGHLY AND SEVERELY REFINED,
 INHALABLE FRACTION (CAS 64742-70-7)
 MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Not classifiable as a human carcinogen.
 PURE, HIGHLY AND SEVERELY REFINED,
 INHALABLE FRACTION (CAS 72623-85-9)
 MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Not classifiable as a human carcinogen.
 PURE, HIGHLY AND SEVERELY REFINED,
 INHALABLE FRACTION (CAS 72623-86-0)
 MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Not classifiable as a human carcinogen.
 PURE, HIGHLY AND SEVERELY REFINED,
 INHALABLE FRACTION (CAS 72623-87-1)
 MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, Not classifiable as a human carcinogen.
 PURE, HIGHLY AND SEVERELY REFINED,
 INHALABLE FRACTION (CAS 74869-22-0)

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Distillates (petroleum), Clay-treated Light Naphthenic (CAS 64742-45-6)	Volume 33, Supplement 7, Volume 100F 1 Carcinogenic to humans.
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)	Volume 33, Supplement 7 - 3 Not classifiable as to carcinogenicity to humans.
Distillates (petroleum), solvent-dewaxed heavy paraffin (CAS 64742-65-0)	Volume 33, Supplement 7 - 3 Not classifiable as to carcinogenicity to humans.
Distillates (petroleum), Solvent-dewaxed Light Naphthenic (CAS 64742-64-9)	Volume 33, Supplement 7, Volume 100F 1 Carcinogenic to humans.
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (CAS 72623-86-0)	Volume 33, Supplement 7 - 3 Not classifiable as to carcinogenicity to humans.
Lubricating Oils (petroleum), C17-32, Solvent-extd., Dewaxed, Hydrogenated (CAS 101316-70-5)	Volume 33, Supplement 7, Volume 100F 1 Carcinogenic to humans.
Lubricating Oils (petroleum), C20-35, Solvent-extd., Dewaxed, Hydrogenated (CAS 101316-71-6)	Volume 33, Supplement 7, Volume 100F 1 Carcinogenic to humans.
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based (CAS 72623-87-1)	Volume 33, Supplement 7 - 3 Not classifiable as to carcinogenicity to humans.
Residual oils (petroleum), hydrotreated (CAS 64742-57-0)	Volume 33, Supplement 7 - 3 Not classifiable as to carcinogenicity to humans.

US NTP Report on Carcinogens: Known carcinogen

Distillates (petroleum), Clay-treated Light Naphthenic (CAS 64742-45-6)	Known To Be Human Carcinogen.
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	Known To Be Human Carcinogen.
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)	Known To Be Human Carcinogen.
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)	Known To Be Human Carcinogen.
Distillates (petroleum), solvent refined light naphthenic (CAS 64741-97-5)	Known To Be Human Carcinogen.
Distillates (petroleum), solvent-dewaxed heavy paraffin (CAS 64742-65-0)	Known To Be Human Carcinogen.
Distillates (petroleum), Solvent-dewaxed Light Naphthenic (CAS 64742-64-9)	Known To Be Human Carcinogen.
Distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4)	Known To Be Human Carcinogen.
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	Known To Be Human Carcinogen.
Distillates (petroleum), solvent-refined light paraffinic (CAS 64741-89-5)	Known To Be Human Carcinogen.
Distillates, petroleum, clay-treated heavy naphthenic (CAS 64742-44-5)	Known To Be Human Carcinogen.
Lubricating oils (A complex combination of hydrocarbons obtained from solvent extraction and dewaxing processes. It consists predominantly of saturated hydrocarbons having carbon numbers in the range C15 through C50.) (CAS 74869-22-0)	Known To Be Human Carcinogen.

Lubricating Oils (petroleum), C>25, Solvent-extd., Deasphalted, Dewaxed, Hydrogenated (CAS 101316-69-2)	Known To Be Human Carcinogen.
Lubricating Oils (petroleum), C17-32, Solvent-extd., Dewaxed, Hydrogenated (CAS 101316-70-5)	Known To Be Human Carcinogen.
Lubricating Oils (petroleum), C20-35, Solvent-extd., Dewaxed, Hydrogenated (CAS 101316-71-6)	Known To Be Human Carcinogen.
Lubricating Oils (petroleum), C24-50, Solvent-extd., Dewaxed, Hydrogenated (CAS 101316-72-7)	Known To Be Human Carcinogen.
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based, high-viscosity (CAS 72623-85-9)	Known To Be Human Carcinogen.
Lubricating oils, petroleum, hydrotreated spent (CAS 64742-58-1)	Known To Be Human Carcinogen.
Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7)	Known To Be Human Carcinogen.
Petroleum distillates, solvent dewaxed light paraffinic (CAS 64742-56-9)	Known To Be Human Carcinogen.
Residual Oils (petroleum), Solvent Deasphalted (CAS 64741-95-3)	Known To Be Human Carcinogen.
Residual oils (Petroleum), solvent-dewaxed (CAS 64742-62-7)	Known To Be Human Carcinogen.
Residual oils (petroleum), solvent-refined (CAS 64742-01-4)	Known To Be Human Carcinogen.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity	Suspected of damaging fertility or the unborn child.
Teratogenicity	Not available.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	Not available.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological Information

Ecotoxicity See below

Ecotoxicological data

Components	Species	Test Results
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)		
Crustacea	EC50 Daphnia	1000 mg/L, 48 Hours
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)		
Crustacea	EC50 Daphnia	1000 mg/L, 48 Hours
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)		
Crustacea	EC50 Daphnia	1000 mg/L, 48 Hours
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)		
Crustacea	EC50 Daphnia	1000 mg/L, 48 Hours
Distillates (petroleum), solvent refined light naphthenic (CAS 64741-97-5)		
Crustacea	EC50 Daphnia	1000 mg/L, 48 Hours
Distillates (petroleum), solvent-dewaxed heavy paraffin (CAS 64742-65-0)		
Crustacea	EC50 Daphnia	1000 mg/L, 48 Hours
Distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4)		
Crustacea	EC50 Daphnia	1000 mg/L, 48 Hours
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)		
Crustacea	EC50 Daphnia	1000 mg/L, 48 Hours
Distillates (petroleum), solvent-refined light paraffinic (CAS 64741-89-5)		
Crustacea	EC50 Daphnia	1000 mg/L, 48 Hours
Lubricating oils (A complex combination of hydrocarbons obtained from solvent extraction and dewaxing processes. It consists predominantly of saturated hydrocarbons having carbon numbers in the range C15 through C50.) (CAS 74869-22-0)		
Crustacea	EC50 Daphnia	1000 mg/L, 48 Hours

Components	Species	Test Results
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (CAS 72623-86-0)		
Crustacea	EC50	Daphnia
		1000 mg/L, 48 Hours
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based (CAS 72623-87-1)		
Crustacea	EC50	Daphnia
		1000 mg/L, 48 Hours
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based, high-viscosity (CAS 72623-85-9)		
Crustacea	EC50	Daphnia
		1000 mg/L, 48 Hours
Petroleum distillates, solvent dewaxed light paraffinic (CAS 64742-56-9)		
Crustacea	EC50	Daphnia
		1000 mg/L, 48 Hours
Residual oils (Petroleum), solvent-dewaxed (CAS 64742-62-7)		
Crustacea	EC50	Daphnia
		1000 mg/L, 48 Hours
Residual oils (petroleum), solvent-refined (CAS 64742-01-4)		
Crustacea	EC50	Daphnia
		1000 mg/L, 48 Hours
Sulfonic acids, petroleum, calcium salts (CAS 61789-86-4)		
Crustacea	EC50	Daphnia
		9.1 mg/L, 48 Hours

Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
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. 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 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	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport Information

Transport of Dangerous Goods (TDG) Proof of Classification	In accordance with Part 2.2.1 (SOR/2014-152) of the Transportation of Dangerous Goods Regulations, we certify that the classification of this product is correct as of the SDS date of issue.
U.S. Department of Transportation (DOT)	Not regulated as dangerous goods.
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 Hazardous Products Regulations (SOR/2015-17) and the SDS contains all the information required by the HPR.
Export Control List (CEPA 1999, Schedule 3)	Not listed.
Greenhouse Gases	Not listed.
Precursor Control Regulations	Not regulated.
WHMIS 2015 Exemptions	Not applicable
US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance No

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

US state regulations

US - California Hazardous Substances (Director's): Listed substance

Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5) Listed.
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6) Listed.
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8) Listed.
Distillates (petroleum), solvent refined light naphthenic (CAS 64741-97-5) Listed.
Distillates (petroleum), solvent-dewaxed heavy paraffin (CAS 64742-65-0) Listed.
Distillates (petroleum), Solvent-dewaxed Light Naphthenic (CAS 64742-64-9) Listed.
Distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4) Listed.
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4) Listed.
Distillates (petroleum), solvent-refined light paraffinic (CAS 64741-89-5) Listed.
Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7) Listed.
Petroleum distillates, solvent dewaxed light paraffinic (CAS 64742-56-9) Listed.
Residual oils (petroleum), hydrotreated (CAS 64742-57-0) Listed.

US - Minnesota Haz Subs: Listed substance

Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5) Listed.
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6) Listed.
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8) Listed.
Distillates (petroleum), solvent refined light naphthenic (CAS 64741-97-5) Listed.
Distillates (petroleum), solvent-dewaxed heavy paraffin (CAS 64742-65-0) Listed.
Distillates (petroleum), Solvent-dewaxed Light Naphthenic (CAS 64742-64-9) Listed.
Distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4) Listed.
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4) Listed.

Distillates (petroleum), solvent-refined light paraffinic (CAS 64741-89-5) Listed.
Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7) Listed.
Petroleum distillates, solvent dewaxed light paraffinic (CAS 64742-56-9) Listed.
Residual oils (petroleum), hydrotreated (CAS 64742-57-0) Listed.

US - Texas Effects Screening Levels: Listed substance

Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5) Listed.
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) Listed.
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6) Listed.
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8) Listed.
Distillates (petroleum), solvent refined light naphthenic (CAS 64741-97-5) Listed.
Distillates (petroleum), Solvent-dewaxed Heavy Naphthenic (CAS 64742-63-8) Listed.
Distillates (petroleum), solvent-dewaxed heavy paraffin (CAS 64742-65-0) Listed.
Distillates (petroleum), Solvent-dewaxed Light Naphthenic (CAS 64742-64-9) Listed.
Distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4) Listed.
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4) Listed.
Distillates (petroleum), solvent-refined light paraffinic (CAS 64741-89-5) Listed.
Lubricating oils, petroleum, hydrotreated spent (CAS 64742-58-1) Listed.
Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7) Listed.
Petroleum distillates, solvent dewaxed light paraffinic (CAS 64742-56-9) Listed.
Residual oils (petroleum), hydrotreated (CAS 64742-57-0) Listed.
Residual oils (Petroleum), solvent-dewaxed (CAS 64742-62-7) Listed.
Residual oils (petroleum), solvent-refined (CAS 64742-01-4) Listed.
Sulfonic acids, petroleum, calcium salts (CAS 61789-86-4) Listed.

US. Massachusetts RTK - Substance List

Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)
Distillates (petroleum), solvent refined light naphthenic (CAS 64741-97-5)
Distillates (petroleum), solvent-dewaxed heavy paraffin (CAS 64742-65-0)
Distillates (petroleum), Solvent-dewaxed Light Naphthenic (CAS 64742-64-9)
Distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4)
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)
Distillates (petroleum), solvent-refined light paraffinic (CAS 64741-89-5)
Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7)
Petroleum distillates, solvent dewaxed light paraffinic (CAS 64742-56-9)
Residual oils (petroleum), hydrotreated (CAS 64742-57-0)

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania Worker and Community Right-to-Know Law

Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)
Distillates (petroleum), solvent refined light naphthenic (CAS 64741-97-5)
Distillates (petroleum), Solvent-dewaxed Light Naphthenic (CAS 64742-64-9)
Distillates (petroleum), solvent-refined light paraffinic (CAS 64741-89-5)
Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7)
Petroleum distillates, solvent dewaxed light paraffinic (CAS 64742-56-9)
Residual oils (petroleum), hydrotreated (CAS 64742-57-0)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

Not Listed.

Inventory status

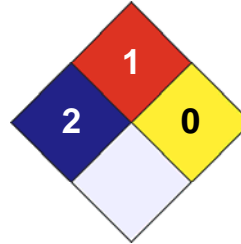
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*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		1
PHYSICAL HAZARD		0
PERSONAL PROTECTION		X



Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available. Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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Prepared by

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Other information

For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.