

1. Product and Company Identification

Product identifier	Ultra Low Sulphur Diesel
Other means of identification	Arctic Diesel Ultra Low Sulfur Heating Oil
Synonyms	Not available.
Recommended use	Fuel
Recommended restrictions	None known.
Manufacturer information	Irving Oil Refining G.P. Box 1260 Saint John, NB E2L 4H6 CA Phone: (506) 202-2000 Refinery: (506) 202-3000 Emergency Phone: 1-800-424-9300 (CHEMTREC)
Supplier	See above.

2. Hazards Identification

Physical hazards	Flammable liquids	Category 3
Health hazards	Acute toxicity, inhalation	Category 4
	Skin corrosion/irritation	Category 2
	Specific target organ toxicity, repeated exposure	Category 2
	Aspiration hazard	Category 1
Environmental hazards	Not classified.	
WHMIS 2015 defined hazards	Not classified	
Label elements		



Signal word	Danger
Hazard statement	Flammable liquid and vapor. Causes skin irritation. May be fatal if swallowed and enters airways. Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure.

Precautionary statement	
Prevention	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/eye protection/face protection.
Response	In case of fire: Use appropriate media to extinguish. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Specific treatment (see information on this label). IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
Storage	Store in a well-ventilated place. Keep cool. 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	Not applicable.

3. Composition/Information on Ingredients

Mixture

Chemical name	Common name and synonyms	CAS number	%
Petroleum distillates		68476-34-6	90-100
Benzene		71-43-2	<0.1
Benzo[a]pyrene		50-32-8	<0.1
Naphthalene		91-20-3	<0.1
Toluene		108-88-3	<0.1

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

Composition comments	<p>*Ultra Low Sulphur Diesel is a complex mixture of hydrocarbons. Its exact composition depends on the source of the crude oil from which it was produced and the refining methods used. Ultra Low Sulphur Diesel contains hundreds of individual organic chemicals. This section identifies only some of the well-known chemical constituents.</p> <p>*Sulphur: < 15 ppm</p> <p>*Hydrogen sulphide: Nil</p>
-----------------------------	--

4. First Aid Measures

Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
Skin contact	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. If skin irritation occurs: Get medical advice/attention. Specific treatment (see information on this label).
Eye contact	Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.
Ingestion	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Take off all contaminated clothing immediately. Wash contaminated clothing before reuse. Keep away from sources of ignition. No smoking. Avoid contact with eyes and skin. Wear rubber gloves and safety glasses with side shields. Keep out of reach of children.

5. Fire Fighting Measures

Suitable extinguishing media	Carbon dioxide. Dry chemical. Foam.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Container may explode in heat of fire. Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back.
Special protective equipment and precautions for firefighters	Firefighters should wear full protective clothing including self-contained breathing apparatus.
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	Flammable liquid and vapor.

Hazardous combustion products

May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Polycyclic aromatic hydrocarbons (PAHs). Aromatic hydrocarbons.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not breathe mist or vapor. Ventilate closed spaces before entering them. 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). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Never return spills to original containers for re-use. Following product recovery, flush area with water. Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS. Prevent entry into waterways, sewers, basements or confined areas.

Environmental precautions

Do not discharge into lakes, streams, ponds or public waters.

7. Handling and Storage

Precautions for safe handling

Vapors may form explosive mixtures with air. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges.

Avoid contact with eyes, skin and clothing.
Wear appropriate personal protective equipment.
Do not breathe mist or vapor.
Use only outdoors or in a well-ventilated area.
Avoid prolonged exposure.
Observe good industrial hygiene practices.
Wash thoroughly after handling.
When handling, do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. 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

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

Components	Type	Value
Benzene (CAS 71-43-2)	STEL	8 mg/m3 2.5 ppm
	TWA	1.6 mg/m3 0.5 ppm
	STEL	79 mg/m3 15 ppm
Naphthalene (CAS 91-20-3)	TWA	52 mg/m3 10 ppm
	TWA	100 mg/m3
Petroleum distillates (CAS 68476-34-6)	TWA	188 mg/m3 50 ppm
Toluene (CAS 108-88-3)	TWA	

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

Components	Type	Value	Form
Benzene (CAS 71-43-2)	STEL	2.5 ppm	
	TWA	0.5 ppm	
Naphthalene (CAS 91-20-3)	STEL	15 ppm	
	TWA	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
Petroleum distillates (CAS 68476-34-6)	TWA	100 mg/m3	Vapor and aerosol.
Toluene (CAS 108-88-3)	TWA	20 ppm	

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

Components	Type	Value	Form
Benzene (CAS 71-43-2)	STEL	2.5 ppm	
	TWA	0.5 ppm	
Naphthalene (CAS 91-20-3)	TWA	10 ppm	
Petroleum distillates (CAS 68476-34-6)	TWA	100 mg/m3	Inhalable fraction and vapor.
Toluene (CAS 108-88-3)	TWA	20 ppm	

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

Components	Type	Value	Form
Benzene (CAS 71-43-2)	STEL	2.5 ppm	
	TWA	0.5 ppm	
Naphthalene (CAS 91-20-3)	STEL	15 ppm	
	TWA	10 ppm	
Petroleum distillates (CAS 68476-34-6)	TWA	100 mg/m3	Inhalable fraction and vapor.
Toluene (CAS 108-88-3)	TWA	20 ppm	

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

Components	Type	Value
Benzene (CAS 71-43-2)	STEL	15.5 mg/m3 5 ppm
	TWA	3 mg/m3 1 ppm
Benzo[a]pyrene (CAS 50-32-8)	TWA	0.005 mg/m3
Naphthalene (CAS 91-20-3)	STEL	79 mg/m3 15 ppm
	TWA	52 mg/m3 10 ppm
Toluene (CAS 108-88-3)	TWA	188 mg/m3 50 ppm

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

Components	Type	Value
Benzene (CAS 71-43-2)	STEL	5 ppm
	TWA	1 ppm

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

Components	Type	Value
Naphthalene (CAS 91-20-3)	PEL	50 mg/m3 10 ppm

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value
Benzene (CAS 71-43-2)	Ceiling	25 ppm
	TWA	10 ppm
Toluene (CAS 108-88-3)	Ceiling	300 ppm
	TWA	200 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Benzene (CAS 71-43-2)	STEL	2.5 ppm	
	TWA	0.5 ppm	

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Naphthalene (CAS 91-20-3)	TWA	10 ppm	
Petroleum distillates (CAS 68476-34-6)	TWA	100 mg/m3	Inhalable fraction and vapor.
Toluene (CAS 108-88-3)	TWA	20 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Benzene (CAS 71-43-2)	STEL	1 ppm
	TWA	0.1 ppm
Naphthalene (CAS 91-20-3)	STEL	75 mg/m3 15 ppm
	TWA	50 mg/m3 10 ppm
	STEL	560 mg/m3 150 ppm
Toluene (CAS 108-88-3)	TWA	375 mg/m3 100 ppm

Biological limit values**ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
Benzene (CAS 71-43-2)	25 µg/g	S-Phenylmercapturic acid	Creatinine in urine	*
Benzo[a]pyrene (CAS 50-32-8)	2.5 µg/l	1-Hydroxypyrene, with hydrolysis (1-HP)	Urine	*
Toluene (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/L	Toluene	Urine	*
	0.02 mg/L	Toluene	Blood	*

* - For sampling details, please see the source document.

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

Benzene (CAS 71-43-2)	Can be absorbed through the skin.
Naphthalene (CAS 91-20-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

Canada - British Columbia OELs: Skin designation

Benzene (CAS 71-43-2)	Can be absorbed through the skin.
Naphthalene (CAS 91-20-3)	Can be absorbed through the skin.
Petroleum distillates (CAS 68476-34-6)	Can be absorbed through the skin.

Canada - Manitoba OELs: Skin designation

Benzene (CAS 71-43-2)	Can be absorbed through the skin.
Naphthalene (CAS 91-20-3)	Can be absorbed through the skin.
Petroleum distillates (CAS 68476-34-6)	Can be absorbed through the skin.

Canada - Ontario OELs: Skin designation

Benzene (CAS 71-43-2)	Can be absorbed through the skin.
Naphthalene (CAS 91-20-3)	Can be absorbed through the skin.
Petroleum distillates (CAS 68476-34-6)	Can be absorbed through the skin.

Canada - Quebec OELs: Skin designation

Toluene (CAS 108-88-3)	Can be absorbed through the skin.
------------------------	-----------------------------------

Canada - Saskatchewan OELs: Skin designation

Naphthalene (CAS 91-20-3)	Can be absorbed through the skin.
Petroleum distillates (CAS 68476-34-6)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Benzene (CAS 71-43-2)	Can be absorbed through the skin.
Naphthalene (CAS 91-20-3)	Can be absorbed through the skin.
Petroleum distillates (CAS 68476-34-6)	Can be absorbed through the skin.

Appropriate engineering controls	Mechanical ventilation should be used when handling this product in enclosed spaces. Local exhaust ventilation may be necessary.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Face shield or chemical goggles.
Skin protection	
Hand protection	Nitrile rubber Viton™. PVC gloves. Tychem™ BR/LV. Tychem™ TK.
Other	Use of protective coveralls and long sleeves is recommended. If clothing or footwear becomes contaminated with the product, remove it and completely decontaminate it before re-use, or discard it.
Respiratory protection	For confined spaces, wear a NIOSH-approved (or equivalent) full-facepiece airline respirator in the positive pressure mode with emergency escape provisions. 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	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. Physical and Chemical Properties

Appearance	Clear
Physical state	Liquid.
Form	Liquid
Color	Water white
Odor	Kerosene
Odor threshold	Not available.
pH	Not applicable
Melting point/freezing point	Not available.
Initial boiling point and boiling range	300 - 700 °F (148.89 - 371.11 °C)
Pour point	-60 - 10 °F (-51.11 - -12.22 °C)
Specific gravity	0.8 - 0.86 @ 15°C
Partition coefficient (n-octanol/water)	3.3 - 7.06 (log Kow)
Flash point	120.0 - 160.0 °F (48.9 - 71.1 °C) Closed Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	0.6-1.3
Flammability limit - upper (%)	6-7.5
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	2.12 - 26.4 mmHg @ 21°C
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	Not available.
Auto-ignition temperature	494.6 °F (257 °C)
Decomposition temperature	Not available.
Viscosity	1.3 - 4.1 cSt @104°F

10. Stability and Reactivity

Reactivity	May react with incompatible materials.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Avoid temperatures exceeding the flash point. Do not mix with other chemicals. Heat, open flames, static discharge, sparks and other ignition sources.

Incompatible materials
Hazardous decomposition products

Acids. Oxidizers.
May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Aromatic hydrocarbons.

11. Toxicological Information

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

Information on likely routes of exposure

Ingestion May be fatal if swallowed and enters airways.
Inhalation Harmful if inhaled. Prolonged inhalation may be harmful. May cause damage to organs by inhalation.
Skin contact Causes skin irritation.
Eye contact Direct contact with eyes may cause temporary irritation.

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

Information on toxicological effects

Acute toxicity Harmful if inhaled. May be fatal if swallowed and enters airways.

Components	Species	Test Results
Benzene (CAS 71-43-2)		
Acute		
<i>Dermal</i>		
LD50	Guinea pig	> 8260 mg/kg, HSDB
	Guinea pig; Rabbit	> 9.4 ml/kg, 24 Hours, ECHA
<i>Inhalation</i>		
LC50	Mouse	9980 ppm, 7 Hours, ECHA
	Rat	43767 mg/m ³ , 4 Hours, ECHA 13700 ppm, 4 Hours, ECHA 10000 ppm, 7 Hours, HSDB 31.8 mg/l/4h, HSDB
<i>Oral</i>		
LD50	Mouse	4700 mg/kg, HSDB
	Rat	> 2000 mg/kg, ECHA 5970 mg/kg, ECHA 4700 mg/kg, HSDB 3306 mg/kg, HSDB
Benzo[a]pyrene (CAS 50-32-8)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg
	Rat	> 2000 mg/kg
<i>Inhalation</i>		
LC50	Not available	
<i>Oral</i>		
LD50	Mouse	433 mg/kg
	Not available	
	Rat	725 mg/kg
Naphthalene (CAS 91-20-3)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2 g/kg
	Rat	> 16000 mg/kg, 24 Hours, ECHA > 2500 mg/kg, ECHA
<i>Inhalation</i>		
LC50	Rat	> 78 ppm, 4 Hours, ECHA

Components	Species	Test Results
		> 0.4 mg/L, 4 Hours, ECHA
<i>Oral</i> LD50	Guinea pig	1200 mg/kg
	Mouse	710 mg/kg, ECHA
		533 mg/kg
	Rat	490 mg/kg
		2.6 g/kg, HSDB
Petroleum distillates (CAS 68476-34-6)		
Acute		
<i>Dermal</i> LD50	Rabbit	> 2000 mg/kg
		> 1800 mg/kg
		> 5 ml/kg, 24 Hours
<i>Inhalation</i> LC50	Rat	1 - 5 mg/l/4h
		4600 mg/m ³ , 4 Hours
		4.1 mg/L, 4 Hours
<i>Oral</i> LD50	Rat	> 5000 mg/kg
		9 ml/kg
Toluene (CAS 108-88-3)		
Acute		
<i>Dermal</i> LD50	Rabbit	> 5000 mg/kg, 24 Hours, ECHA
		12124 mg/kg, HSDB
		14.1 ml/kg, HSDB
<i>Inhalation</i> LC50	Mouse	6405 - 7436 ppm, 6 Hours, ECHA
		5320 ppm, 8 Hours, ECHA/HSDB
		400 ppm, 24 Hours, HSDB
	Rat	26700 ppm, 1 Hours, HSDB
		12200 ppm, 2 Hours, HSDB
		8000 ppm, 4 Hours, HSDB
		5879 - 6281 ppm, 6 Hours, ECHA
		30 mg/L, 4 Hours, ECHA
		28.1 mg/L, 4 Hours, ECHA
		25.7 mg/L, 4 Hours, ECHA
<i>Oral</i> LD50	Rat	> 5000 mg/kg, ECHA
		5580 mg/kg, ECHA
		2.6 g/kg, HSDB
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 sensitization	
Respiratory sensitization	Not available.
Skin sensitization	This product is not expected to cause skin sensitization.
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	
Benzene (CAS 71-43-2)	A1 Confirmed human carcinogen.
Benzo[a]pyrene (CAS 50-32-8)	A2 Suspected human carcinogen.
Naphthalene (CAS 91-20-3)	A3 Confirmed animal carcinogen with unknown relevance to humans.
Petroleum distillates (CAS 68476-34-6)	A3 Confirmed animal carcinogen with unknown relevance to humans.
Canada - Alberta OELs: Carcinogen category	
Benzene (CAS 71-43-2)	Confirmed human carcinogen.
Canada - Manitoba OELs: carcinogenicity	
BENZENE (CAS 71-43-2)	Confirmed human carcinogen.
BENZO[A]PYRENE (CAS 50-32-8)	Suspected human carcinogen.
DIESEL FUEL, AS TOTAL HYDROCARBONS, INHALABLE FRACTION AND VAPOR (CAS 68476-34-6)	Confirmed animal carcinogen with unknown relevance to humans.
NAPHTHALENE (CAS 91-20-3)	Confirmed animal carcinogen with unknown relevance to humans.
Canada - Quebec OELs: Carcinogen category	
Benzene (CAS 71-43-2)	Detected carcinogenic effect in humans.
Benzo[a]pyrene (CAS 50-32-8)	Suspected carcinogenic effect in humans.
IARC Monographs. Overall Evaluation of Carcinogenicity	
Benzene (CAS 71-43-2)	Volume 29, Supplement 7, Volume 100F 1 Carcinogenic to humans.
Benzo[a]pyrene (CAS 50-32-8)	Volume 92, Volume 100F 1 Carcinogenic to humans.
Naphthalene (CAS 91-20-3)	Volume 82 - 2B Possibly carcinogenic to humans.
Petroleum distillates (CAS 68476-34-6)	Volume 45 - 3 Not classifiable as to carcinogenicity to humans.
Toluene (CAS 108-88-3)	Volume 47, Volume 71 - 3 Not classifiable as to carcinogenicity to humans.
US - California Proposition 65 - CRT: Listed date/Carcinogenic substance	
Benzene (CAS 71-43-2)	
Benzo[a]pyrene (CAS 50-32-8)	
Naphthalene (CAS 91-20-3)	
US NTP Report on Carcinogens: Anticipated carcinogen	
Benzo[a]pyrene (CAS 50-32-8)	Reasonably Anticipated to be a Human Carcinogen.
Naphthalene (CAS 91-20-3)	Reasonably Anticipated to be a Human Carcinogen.
US NTP Report on Carcinogens: Known carcinogen	
Benzene (CAS 71-43-2)	Known To Be Human Carcinogen.
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	
Benzene (CAS 71-43-2)	Cancer
Reproductive toxicity	Not classified.
Teratogenicity	Toluene (benzene, methyl-) has caused fetotoxicity (reduced fetal weight), behavioural effects (effects on learning and memory) and hearing loss (in males). These effects have been observed in the offspring of rats exposed by inhalation to 1200 or 1800 ppm toluene. These effects were observed in the absence of maternal toxicity.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	May be fatal if swallowed and enters airways.
Chronic effects	Prolonged inhalation may be harmful. Prolonged or repeated exposure can cause kidney damage.

12. Ecological Information

Ecotoxicity Components of this product have been identified as having potential environmental concerns.

Ecotoxicological data

Components		Species	Test Results
Benzene (CAS 71-43-2)			
Algae	IC50	Algae	29 mg/L, 72 Hours
Crustacea	EC50	Daphnia	12.18 mg/L, 48 Hours
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	8.76 - 15.6 mg/L, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	7.2 - 11.7 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 (Daphnia magna)	1.09 - 3.4 mg/L, 48 hours
Fish	LC50	Pink salmon (Oncorhynchus gorbuscha)	1.11 - 1.68 mg/L, 96 hours
Toluene (CAS 108-88-3)			
Algae	IC50	Algae	433 mg/L, 72 Hours
Crustacea	EC50	Daphnia	7.645 mg/L, 48 Hours
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	5.46 - 9.83 mg/L, 48 hours
Fish	LC50	Coho salmon,silver salmon (Oncorhynchus kisutch)	8.11 mg/L, 96 hours
Persistence and degradability	Non-persistent/ Group 1		
Bioaccumulative potential	Not 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	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	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	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.
---	--

U.S. Department of Transportation (DOT)**Basic shipping requirements:**

UN number	UN1202
Proper shipping name	Diesel fuel
Hazard class	3
Packing group	III
Special provisions	144, B1, IB3, T2, TP1
Packaging exceptions	150

Transportation of Dangerous Goods (TDG - Canada)**Basic shipping requirements:**

UN number	UN1202
Proper shipping name	DIESEL FUEL; FUEL OIL; GAS OIL; or HEATING OIL LIGHT
Hazard class	3
Packing group	III

DOT



TDG



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.

Canada CEPA Schedule I: Listed substance

Benzene (CAS 71-43-2)	Listed.
Benzo[a]pyrene (CAS 50-32-8)	Listed.
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

Benzene (CAS 71-43-2)	1 TONNES
Benzo[a]pyrene (CAS 50-32-8)	1 TONNES
Toluene (CAS 108-88-3)	1 TONNES

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Toluene (CAS 108-88-3)	Class B
------------------------	---------

WHMIS 2015 Exemptions Controlled

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)

Benzene (CAS 71-43-2)	Listed.
Benzo[a]pyrene (CAS 50-32-8)	Listed.
Naphthalene (CAS 91-20-3)	Listed.
Toluene (CAS 108-88-3)	Listed.

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

Benzene (CAS 71-43-2)	Cancer
	Central nervous system
	Blood
	Aspiration
	Skin
	Eye
	respiratory tract irritation
	Flammability

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
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

Benzene (CAS 71-43-2)
Benzo[a]pyrene (CAS 50-32-8)
Naphthalene (CAS 91-20-3)
Toluene (CAS 108-88-3)

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

Not regulated.

US state regulations See below

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

Benzene (CAS 71-43-2) Listed.
Benzo[a]pyrene (CAS 50-32-8) Listed.
Naphthalene (CAS 91-20-3) Listed.
Toluene (CAS 108-88-3) Listed.

US - Illinois Chemical Safety Act: Listed substance

Benzene (CAS 71-43-2)
Benzo[a]pyrene (CAS 50-32-8)
Naphthalene (CAS 91-20-3)
Toluene (CAS 108-88-3)

US - Louisiana Spill Reporting: Listed substance

Benzene (CAS 71-43-2) Listed.
Benzo[a]pyrene (CAS 50-32-8) Listed.
Naphthalene (CAS 91-20-3) Listed.
Toluene (CAS 108-88-3) Listed.

US - Michigan Critical Materials Register: Parameter number

Benzene (CAS 71-43-2) BENZENE
Benzo[a]pyrene (CAS 50-32-8) BENZO(A)PYRENE
Toluene (CAS 108-88-3) TOLUENE

US - Minnesota Haz Subs: Listed substance

Benzene (CAS 71-43-2) Listed.
Benzo[a]pyrene (CAS 50-32-8) Listed.
Naphthalene (CAS 91-20-3) Listed.
Toluene (CAS 108-88-3) Listed.

US - New Jersey RTK - Substances: Listed substance

Benzene (CAS 71-43-2)
Benzo[a]pyrene (CAS 50-32-8)
Naphthalene (CAS 91-20-3)
Toluene (CAS 108-88-3)

US - North Carolina Toxic Air Pollutants: Listed substance

Benzene (CAS 71-43-2)
Benzo[a]pyrene (CAS 50-32-8)
Toluene (CAS 108-88-3)

US - Pennsylvania RTK - Hazardous Substances: Special hazard

Benzene (CAS 71-43-2)
Benzo[a]pyrene (CAS 50-32-8)

US - Texas Effects Screening Levels: Listed substance

Benzene (CAS 71-43-2) Listed.
Benzo[a]pyrene (CAS 50-32-8) Listed.
Naphthalene (CAS 91-20-3) Listed.
Petroleum distillates (CAS 68476-34-6) Listed.
Toluene (CAS 108-88-3) Listed.

US - Washington Chemical of High Concern to Children: Listed substance

Benzene (CAS 71-43-2)
Toluene (CAS 108-88-3)

US. Massachusetts RTK - Substance List

Benzene (CAS 71-43-2)
Benzo[a]pyrene (CAS 50-32-8)
Naphthalene (CAS 91-20-3)
Toluene (CAS 108-88-3)

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

Benzene (CAS 71-43-2)
Benzo[a]pyrene (CAS 50-32-8)
Naphthalene (CAS 91-20-3)
Petroleum distillates (CAS 68476-34-6)
Toluene (CAS 108-88-3)

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

Benzene (CAS 71-43-2)
Benzo[a]pyrene (CAS 50-32-8)
Naphthalene (CAS 91-20-3)
Petroleum distillates (CAS 68476-34-6)
Toluene (CAS 108-88-3)

US. Rhode Island RTK

Benzene (CAS 71-43-2)
Benzo[a]pyrene (CAS 50-32-8)
Naphthalene (CAS 91-20-3)
Toluene (CAS 108-88-3)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Benzene (CAS 71-43-2) Listed: February 27, 1987
Benzo[a]pyrene (CAS 50-32-8) Listed: July 1, 1987
Naphthalene (CAS 91-20-3) Listed: April 19, 2002

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Benzene (CAS 71-43-2) Listed: December 26, 1997
Toluene (CAS 108-88-3) Listed: January 1, 1991

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

Benzene (CAS 71-43-2) Listed: December 26, 1997

Inventory status

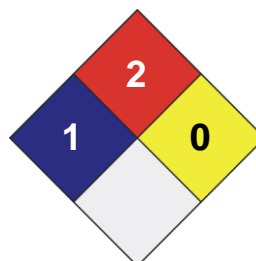
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*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	* 1
FLAMMABILITY	2
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X



Disclaimer

The information contained in this form is based on data from sources considered to be reliable but Irving Oil Refining G.P. does not guarantee the accuracy or completeness thereof. The information is provided as a service to the persons purchasing or using the material to which it refers and Irving Oil Refining G.P. expressly disclaims all liability for loss or damage including consequential loss or for injury to persons including death. The information shall not be reproduced, published or distributed in any manner without prior consent in writing of Irving Oil Refining G.P.

Issue date 18-May-2018
Version # 03
Effective date 18-May-2018

Prepared by
Other information

Dell Tech Laboratories, Ltd. Phone: (519) 858-5021

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