SAFETY DATA SHEET

Prepared to OSHA, ACC, ANSI, WHSR, WHMIS, GHS & EU Standards | SDS Revision: 1.1 | SDS Revision Date: 12/14/2019

1. PRODUCT & COMPANY IDENTIFICATION

1.1	Product Name:	**PETRA DIESEL POWER**
1.2	Chemical Name:	Petroleum Distillates
1.3	Synonyms:	3001
1.4	Trade Names:	Petra Fuel Power
1.5	Product Use:	Fuel Additive
1.6	Distributor's Name:	Petra Oil NZ
1.7	Distributor's Address:	50 Jacobs Lane, Ngaruawahia 3792, New Zealand
1.8	Emergency Phone:	**NZ NATIONAL POISONS CENTRE (0800) 764 766**
1.9	Business Phone / Fax:	Tel: +64 (21) 771 703

2. HAZARDS IDENTIFICATION

2.1 Hazard Identification:

This product is classified as a **HAZARDOUS SUBSTANCE** and as **DANGEROUS GOODS** according to the classification criteria of WHSR and ADG Code (Australia).

DANGER! FLAMMABLE LIQUID AND VAPOR. MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. HARMFUL IF SWALLOWED OR IN CONTACT WITH SKIN. TOXIC IF INHALED. MAY CAUSE GENETIC DEFECTS. MAY CAUSE CANCER. SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD. MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

Classification: Flam. Liq. 3, Acute Tox. 4 (oral), Acute Tox. 4 (dermal), Acute Tox. 3 (inh), Skin Irrit. 2, Carc. 1A, Repr. 2, Muta. 1B, STOT RE 2, Asp. Tox. 1

2.2 Label Elements:

Hazard Statements (H): H226 - Flammable liquid and vapor. H304 - May be fatal if swallowed and enters airways. H302 - Harmful if swallowed. H312 - Harmful in contact with skin. H331 - Toxic if inhaled. H340 - May cause genetic defects. H350 - May cause cancer. H361 - Suspected of damaging fertility or the unborn child. H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements (P): P201 - Obtain special instructions. P202 - Do not handle until all safety precautions have been read and understood. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 - Keep container tightly closed. P240 - Ground/Bond container and receiving equipment. P241 - Use explosion-proof electrical, ventilating, lighting equipment. P242 - Use only non-sparking tools. P243 - Take precautionary measures against static discharge. P261 – Avoid breathing fumes, mist, vapor or spray. P264 - Wash affected areas thoroughly after handling. P270 – Wash hands and exposed skin areas with soap and warm water thoroughly after handling. P271 - Use only outdoors or in a well-ventilated area. P280 - Wear protective gloves, protective clothing, eye protection, face protection. P301+P310 - If swallowed: Immediately call a poison control center, doctor/physician. P302+P352 - If on skin: Wash with plenty of soap and water. P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing. P308+P313 - If exposed or concerned: Get medical advice/attention. P312 - Call a POISON CONTROL CENTER, doctor, if you feel unwell. P314 - Get medical advice/attention if you feel unwell. P321 - Specific treatment: See section 4.1 of the Safety Data Sheet. P330 – Rinse mouth. P331 - Do NOT induce vomiting. P362+P364 - Take off contaminated clothing and wash it before reuse. P370+P378 - In case of fire: In case of fire: Use CO_2, foam, dry powder or water spray to extinguish. P403+P235 - Store in a well-ventilated place. Keep cool. P405 - Store locked up. P501 - Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.

2.3 Other Warnings:

In the event of an exposure or medical inquiry involving this product, please contact a physician or local poison control center, who may seek advice from the U.S. manufacturer, and show them this SDS. If medical advice is needed, have product container or label at hand. **KEEP OUT OF REACH OF CHILDREN**.

WARNING: This product can expose you to chemicals including naphthalene, ethylbenzene, benzene and cumene which are known to the State of California to cause cancer and toluene and benzene which are known to the State of California to cause reproductive harm.

3. COMPOSITION & INGREDIENT INFORMATION

CHEMICAL NAME(S)	CAS No.	RTECS No.	EINECS No.	%	EXPOSURE LIMITS IN AIR (mg/m³) ACGIH ppm TLV	ACGIH ppm STEL	NOHSC ppm ES-TWA	NOHSC ppm ES-STEL	NOHSC ppm ES-PEAK	OSHA ppm PEL	OSHA ppm STEL	OSHA ppm IDLH	OTHER
KEROSENE	8008-20-6	OA5500000	232-366-4	60-100	NA	NA	NF	NF	NF	NA	NA	NA	
	Asp. Tox. 1; H304												
DISTILLATES, PETROLEUM, PETROLEUM RESIDUES VAC. *	68955-27-1	NA	273-263-4	≤ 65	NA	NA	NF	NF	NF	NA	NA	NA	
	Carc. 1B; H350												
2-ETHYLHEXYL NITRATE	27247-96-7	QU7925000	248-363-6	10-20	NA	NA	NF	NF	NF	NA	NA	NA	
	Acute Tox. 4; Aquatic Chronic 2; H302, H312, H332, H411												
SOLVENT NAPHTHA (PETROLEUM), HEAVY AROMATIC	64742-94-5	NA	265-198-5	3-10	NA	NA	NF	NF	NF	NA	NA	NA	
	Asp. Tox. 1; H304												

3. COMPOSITION & INGREDIENT INFORMATION

NAPHTHALENE	91-20-3	QJ0525000	202-049-5	0-5	10	15	(10)	52	NF	10	15	250	
	Carc. 2; Acute Tox. 4 *; Aquatic Acute 1; Aquatic Chronic 1; H351, H302, H400, H410; HSNO: HSR001287												
SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC*	64742-95-6	NA	265-199-0	2-5	NA	NA	NF	NF	NF	NA	NA	NA	
	Asp. Tox. 1; Muta. 1B; Carc. 1B; H304, H340, H350; HSNO: HSR001503												
2-ETHYLHEXANOL	104-76-7	MP0350000	203-234-3	2-5	NA	NA	NF	NF	NF	NA	NA	NA	
	Eye Irrit. 2; H319; HSNO: HSR001386												
XYLENE, MIXED ISOMERS	1330-20-7	ZE2100000	215-535-7	≤ 3	100	150	(80)	350	NF	100	150	900	
	Flam. Liq. 3, Acute Tox. (dermal) 4; Acute Tox. (inh) 4; Skin Irrit. 2; H226, H312, H332, H315; HSNO: HSR000983												
TRIMETHYLBENZENE	25551-13-7	DC3220000	247-099-9	≤ 2	25	NA	(25)	123	NF	25	NA	NA	
	Flam. Liq. 3; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; Asp. Tox. 1; Aquatic Acute 2; Aquatic Chronic 2; H226, H304, H315, H319, H332, H335, H411												
1,2,4 TRIMETHYLBENZENE	95-63-6	DC3325000	202-436-9	≤ 2	25	NA	NF	NF	NF	NA	NA	NA	25 NIOSH
	Flam. Liq. 3; Acute Tox. 4 *; Eye Irrit. 2; STOT SE 3; Skin Irrit. 2; Aquatic Chronic 2; H226, H332, H319, H335, H315, H411; HSNO: HSR001382												
TOLUENE	108-88-3	XS5250000	203-625-9	≤ 1	50	300	(50)	191	NF	200	300	500	
	Flam. Liq. 2; Repr. 2; Asp. Tox. 1; STOT RE 2; Skin Irrit. 2; STOT SE 3; H225, H361d, H304, H373, H315, H336; HSNO: HSR001227												
ETHYLBENZENE	100-41-4	DA0700000	202-849-4	≤ 1	100	125	(100)	(435)	NF	100	125	800	
	Flam. Liq. 2; Acute Tox. (inh) 4, Carc. 2; STOT RE 2; Asp. Tox. 1; H225, H332, H351, H373, H304; HSNO: HSR001151												
CYCLOHEXANE	110-82-7	GU6300000	203-806-2	≤ 1	300	NA	(100)	350	NF	300	NA	1300	
	Flam. Liq. 2; Asp. Tox. 1; Skin Irrit. 2; STOT SE 3; Aquatic Acute 1; Aquatic Chronic 1; H225, H304, H315, H336, H400, H410; HSNO: HSR001111												
BENZENE	71-43-2	CY1400000	200-753-7	≤ 0.5	0.5	NA	(1)	3.2	NF	25	NA	500	
	Flam. Liq. 2; Carc. 1A; Muta. 1B; STOT RE 1; Asp. Tox. 1; Eye Irrit. 2; Skin Irrit. 2; H225, H350, H340, H372 **, H304, H319, H315; HSNO: HSR001038												
CUMENE	98-82-8	GR8575000	202-704-5	≤ 0.2	50	NA	(25)	125	NF	50	NA	900	
	Flam. Liq. 3; Carc. 2; STOT SE 3; Asp. Tox. 1; Aquatic Acute 2; Aquatic Chronic 2; H226, H304, H335, H351, H411; HSNO: HSR001184												

* < 3% DIMETHYL SULFOXIDE (DMSO) per IP346

4. FIRST AID MEASURES

4.1	First Aid:	Ingestion:	DO NOT INDUCE VOMITING. Contact Poison Control Center or local emergency telephone number for assistance and instructions. If you feel unwell, seek medical advice (show the label where possible). If vomiting occurs spontaneously, keep victim's head lowered (forward) to reduce the risk of aspiration.
		Eyes:	If product gets in the eyes, flush eyes thoroughly with copious amounts of water for at least 15 minutes, holding eyelid(s) open to ensure complete flushing. If the eyes or face become swollen during or following use, consult a physician or emergency room immediately.
		Skin:	Remove contaminated clothing and wash affected areas with soap and water. If discomfort persists and/or the skin reaction worsens, contact a physician immediately. Do not wear contaminated clothing until after it has been properly cleaned.
		Inhalation:	Remove victim to fresh air at once. Under extreme conditions, if breathing stops, perform artificial respiration. Seek immediate medical attention.
4.2	Effects of Exposure:	Ingestion:	Irritation to the gastrointestinal tract. This material can enter the lungs during swallowing or vomiting and cause lung damage.
		Eyes:	Irritation upon direct contact. Symptoms may include stinging, tearing, redness and swelling.
		Skin:	Mildly irritating. Prolonged or repeated skin contact can result in defatting, drying of the skin with symptoms of redness, stinging.
		Inhalation:	Harmful if inhaled. May cause respiratory irritation. Danger of serious damage to health by prolonged exposure through inhalation. May be fatal if swallowed and enters airways.
4.3	Symptoms of Overexposure:	Ingestion:	Nausea, intestinal discomfort, vomiting and/or diarrhea.
		Eyes:	Overexposure in eyes may cause redness, itching and watering.
		Skin:	Symptoms of skin overexposure may include redness, itching, and irritation of affected areas. The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) in some individuals.
		Inhalation:	May cause respiratory irritation. Irritation of the nasal mucous membranes. Irritation of the respiratory tract. Danger of serious damage to health by prolonged exposure through inhalation.
4.4	Acute Health Effects:	Moderate irritation to eyes and skin near affected areas. Additionally, high concentrations of vapors can cause drowsiness, dizziness, headaches and nausea.	
4.5	Chronic Health Effects:	Suspected of causing cancer. IF exposed or concerned: Get medical advice/attention. Suspected of damaging fertility or the unborn child. Causes damage to organs. Repeated exposure to this material can result in absorption through skin causing significant health hazard.	
4.6	Target Organs:	Eyes, Skin, Lungs	
4.7	Medical Conditions Aggravated by Exposure:	Pre-existing skin, eye, or respiratory disorders.	

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EYES	SKIN	LUNGS

5. FIREFIGHTING MEASURES

5.1	Fire & Explosion Hazards:	**DANGER! FLAMMABLE LIQUID AND VAPOR.** May form flammable/explosive vapor-air mixture. Keep away from heat, hot surface, sparks, open flames and other ignition sources. No smoking. Use foam, dry powder, carbon dioxide, water spray or sand to extinguish fire. Do NOT use a heavy water stream. If involved in a fire, this product may decompose at high temperatures to form toxic gases (e.g., CO, CO_X, hydrocarbons). Vapors of this product are heavier than air and may travel to a source of ignition and flash back to a leaking or open container.
5.2	Extinguishing Methods:	For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. For large fires, use water spray, fog or alcohol-resistant foam. Do NOT use straight streams of water.
5.3	Firefighting Procedures:	As with any fire, firefighters should wear appropriate protective equipment including a MSHA/NIOSH approved or equivalent self-contained breathing apparatus (SCBA) and protective clothing. Treat as hot oil. Hazardous decomposition products may be released. Thermal degradation may produce oxides of carbon, and/or nitrogen, hydrocarbons and/or derivatives. Fire should be fought from a safe distance. Keep containers cool until well after the fire is out. Use water spray to cool fire-exposed surfaces and to protect personal. Fight fire upwind. Prevent runoff from fire control or dilution from entering sewers, drains, drinking water supply, or any natural waterway.

6. ACCIDENTAL RELEASE MEASURES

6.1	Spills:	Before cleaning any spill or leak, individuals involved in spill cleanup must wear appropriate Personal Protective Equipment. For small spills (e.g., < 1 gallon (3.8 L)) wear appropriate personal protective equipment (e.g., goggles, gloves). Maximize ventilation (open doors and windows) and secure all sources of ignition. Remove spilled material with absorbent material and place into appropriate closed container(s) for disposal. Dispose of properly in accordance with local, state and federal regulations. Wash all affected areas and outside of container with plenty of warm water and soap. Remove any contaminated clothing and wash thoroughly before reuse. For large spills (e.g., ≥ 1 gallon (3.8 L)), deny entry to all unprotected individuals. Dike and contain spill with inert material (e.g., sand or earth). Use ONLY non-sparking tools for recovery and cleanup. Transfer liquid to containers for recovery or disposal and solid diking material to separate containers for proper disposal. Remove contaminated clothing promptly and wash affected skin areas with soap and water. Keep spills and cleaning runoffs out of municipal sewers and open bodies of water.

7. HANDLING & STORAGE INFORMATION

7.1	Work & Hygiene Practices:	Avoid prolonged contact with the product. Avoid breathing vapors of this product. Use in a well-ventilated location (e.g., local exhaust ventilation, fans). After use, wash hands and exposed skin with soap and water. Do not eat, drink or smoke while handling product.
7.2	Storage & Handling:	Keep this material away from heat, sparks and open flame. Open containers slowly on a stable surface. Keep container closed tightly when not in use. Empty container may contain residual amounts of this product; therefore, empty containers should be handled with care. Store containers in a cool, dry location, away from direct sunlight, other light sources, or sources of intense heat. Store away from incompatible materials (See Section 10).
7.3	Special Precautions:	Open containers slowly on a stable surface. Keep container tightly closed when not in use. Empty containers may contain residual amounts of this product; therefore, empty containers should be handled with care.

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

8.1 Exposure Limits: ppm (mg/m^3)

	ACGIH		NOHSC			OSHA			OTHER
CHEMICAL NAME(S)	TLV	STEL	ES-TWA	ES-STEL	ES-PEAK	PEL	STEL	IDLH	
NAPHTHALENE	10	15	(10)	52	NF	10	15	250	
XYLENE	100	150	(80)	350	NF	100	150	900	
TRIMETHYLBENZENE	25	NA	(25)	123	NF	25	NA	NA	
TOLUENE	50	300	(50)	191	NF	200	300	500	
ETHYLBENZENE	100	125	(100)	(435)	NF	100	125	800	
CYCLOHEXANE	300	NA	(100)	350	NF	300	NA	1300	
BENZENE	0.5	NA	(1)	3.2	NF	25	NA	500	
CUMENE	50	NA	(25)	125	NF	50	NA	900	

8.2	Ventilation & Engineering Controls:	Use general/dilution or local exhaust ventilation as needed to ensure that occupational exposure limits are not exceeded. Do not use in enclosed spaces. When working with large quantities of product, provide adequate ventilation (e.g., local exhaust ventilation, fans). Ensure that an eyewash station, sink or washbasin is available in case of exposure to eyes.
8.3	Respiratory Protection:	Vaporization or misting is not expected at ambient temperatures. Therefore, the need for respiratory protection is not anticipated under normal use conditions and with adequate ventilation. If elevated airborne concentrations above applicable workplace exposure levels are anticipated, a NIOSH-approved organic vapor respirator equipped with a dust/mist pre-filter should be used. Protection factors vary depending upon the type of respirator used. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134).

8. EXPOSURE CONTROLS & PERSONAL PROTECTION – cont'd

8.4	Eye Protection:	Wear protective eyewear (e.g., safety glasses with side-shield) at all times when handling this product. Always use protective eyewear when cleaning spills or leaks. Contact lenses pose a special hazard; soft lenses may absorb and concentrate irritants. Have suitable eye wash water available. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).	
8.5	Hand Protection:	Use gloves constructed of chemical-resistant materials such as neoprene or heavy nitrile rubber if frequent or prolonged contact is expected. If necessary, refer to U.S. OSHA 29 CFR §1910.138, the appropriate standards of Canada, or the EU member states.	
8.6	Body Protection:	Avoid prolonged and/or repeated skin contact. Use clean and impervious protective clothing (e.g., neoprene or Tyvek®). Protective clothing should include long-sleeves, apron, boots and additional facial protection. If necessary, refer to appropriate standards of Canada, the EU member states, or U.S. OSHA.	

9. PHYSICAL & CHEMICAL PROPERTIES

9.1	Appearance:	Clear, yellow or brown liquid.
9.2	Odor:	Strong, kerosene odor.
9.3	Odor Threshold:	NA
9.4	pH:	NA
9.5	Melting Point/Freezing Point:	NA
9.6	Initial Boiling Point/Boiling Range:	104-304 °C (220-580 °F)
9.7	Flashpoint:	31 °C (88 °F)
9.8	Upper/Lower Flammability Limits:	LEL: 0.7% / UEL: 6%
9.9	Vapor Pressure:	< 5.2 mm Hg @ 20 °C
9.10	Vapor Density:	3 (Air = 1.0)
9.11	Relative Density:	0.79-0.90
9.12	Solubility:	Very slightly soluble in cold water.
9.13	Partition Coefficient (log P_{ow}):	NA
9.14	Autoignition Temperature:	204 °C (400 °F)
9.15	Decomposition Temperature:	NA
9.16	Viscosity:	NA
9.17	Other Information:	NA

10. STABILITY & REACTIVITY

10.1	Stability:	Relatively stable under ambient conditions when stored properly. Flammable liquid and vapor. May form flammable/ explosive vapor-air mixture.
10.2	Hazardous Decomposition Products:	If exposed to extremely high temperatures, products of thermal decomposition may include irritating vapors and toxic gases (e.g., oxides of carbon & nitrogen).
10.3	Hazardous Polymerization:	Will not occur.
10.4	Conditions to Avoid:	Exposure or contact to extreme temperatures, incompatible chemicals, strong light sources, sparks, flame.
10.5	Incompatible Substances:	Strong oxidizers, peroxides or strong acids or alkalis.

11. TOXICOLOGICAL INFORMATION

11.1	Routes of Entry:	Inhalation:	YES	Absorption:	YES	Ingestion:	yes
11.2	Toxicity Data:	This product has NOT been tested on animals to obtain toxicology data. Toxicology data, found in scientific literature, is available for some of the components of the product and is presented below: 1,2,4-Trimethylbenzene – LD_{50} (oral, rat): 5,000 mg/kg; 2-Ethylhexan-1-ol – LD_{50} (oral, rat): 3,730 mg/kg; 2-Ethylhexyl Nitrate – LD_{50} (oral, rat): 590 mg/kg; Benzene – LD_{50} (oral, rat): 930 mg/kg; Cumene – LD_{50} (oral, rat): 2,260 mg/kg; Cyclohexane – LD_{50} (oral, rat): 12705 mg/kg; Kerosene (Petroleum) – LD_{50} (oral, rat): 2,835 mg/kg; Naphthalene – LD_{50} (oral, rat): 490 mg/kg; Trimethylbenzene – LD_{50} (oral, rat): 8,970 mg/kg; Xylene – LD_{50} (oral, rat): 3,523 mg/kg; LD_{50} (dermal, rabbit) > 4,200 mg/kg; LC_{50} (inh, rat, 4h): 1.5 mg/L; Ethylbenzene – LD_{50} (oral, rat): 3,500 mg/kg; LD_{50} (dermal, rabbit) 15,415 mg/kg; LC_{50} (inh, rat, 4h): 17.8 mg/L; Petroleum Distillates, Hydrotreated Light – LD_{50} (oral, rat) > 5,000 mg/kg; LD_{50} (dermal, rabbit) > 2,000 mg/kg; LC_{50} (inh, rat, 4h) > 5.28 mg/L; Toluene – LD_{50} (oral, rat): 5,580 mg/kg; LD_{50} (dermal, rabbit) > 5,000 mg/kg; LC_{50} (inh, rat, 4h) > 28.1 mg/L.				
11.3	Acute Toxicity:	May be fatal if swallowed and enters airways. Harmful if swallowed. Toxic if inhaled.					
11.4	Chronic Toxicity:	May cause genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. Danger of serious damage to health by prolonged exposure through inhalation.					

11. TOXICOLOGICAL INFORMATION

11.5	Suspected Carcinogen:	The following substance(s) is/are listed on the IARC Group 1 list (Carcinogenic to Humans): Benzene. The following substance(s) is/are listed on the IARC Group 2B list (Possibly Carcinogenic to Humans): Cumene, Ethylbenzene and Naphthalene. The following substance(s) is/are listed on the IARC Group 3 list (Not Classifiable as to its Carcinogenicity to Humans): Toluene and Xylene. The following substances are listed on the California Proposition 65 (cancer) list: Naphthalene, Ethylbenzene, Benzene and Cumene.
11.6	Reproductive Toxicity:	This product is not reported to produce reproductive toxicity in humans.
	Mutagenicity:	This product is not reported to produce mutagenic effects in humans.
	Embryotoxicity:	This product is not reported to produce embryotoxic effects in humans.
	Teratogenicity:	This product is not reported to cause teratogenic effects in humans.
	Reproductive Toxicity:	Benzene and Toluene are suspected of damaging fertility or the unborn child and are listed on the California Prop 65 (reproductive) list.
11.7	Irritancy of Product:	See Section 4.2
11.8	Biological Exposure Indices:	NE
11.9	Physician Recommendations:	Treat symptomatically.

12. ECOLOGICAL INFORMATION

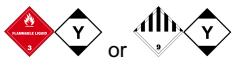
12.1	Environmental Stability:	Data, available from scientific literature, is available for some of the components of this mixture and is presented below. Partition Coefficient (log P_{ow}): 1,2,4-Trimethylbenzene: 3.63; 2-Ethylhexan-1-ol: 3.1; 2-Ethylhexyl Nitrate: 4.14; Benzene: 1.83; Cumene: 3.55; Cyclohexane: 3.44; Naphthalene: 3.3; Xylene: 2.77-3.15; Ethylbenzene: 3.118; Toluene: 2.65; Naphtha (Petroleum), Heavy Aromatic: 2.9-6.1.
12.2	Effects on Plants & Animals:	There are no specific data available for this product. An environmental fate analysis has not been conducted on this specific product. However, plants and animals may experience harmful or fatal effects when coated with petroleum-based products.
12.3	Effects on Aquatic Life:	Xylene - LC_{50} (Oncorhynchus mykiss, 96h): 8.4 mg/L; LC_{50} (Pimephales promelas, 96h): 16.0 mg/L; EC_{50} (Daphnia magna, 48h): 4.7 mg/L. Ethylbenzene: LC_{50} (Lepomis macrochirus, 96h): 32.0 mg/L; LC_{50} (Pimephales promelas, 96h): 12.1 mg/L; EC_{50} (Daphnia magna, 48h): 4.7 mg/L. Toluene: LC_{50} (Lepomis macrochirus, 96h): 17.0 mg/L; EC_{50} (Daphnia magna, 48h): 313 mg/L.

13. DISPOSAL CONSIDERATIONS

13.1	Waste Disposal:	Dispose of in accordance with local, state, provincial and federal laws and regulations. Disposal of hazardous waste must be through by a licensed treatment, storage or disposal facility (TSDF).
13.2	Special Considerations:	U.S. EPA RCRA Characteristic Waste (Ignitable): D001, D018 (benzene)

14. TRANSPORTATION INFORMATION

The basic description (ID Number, proper shipping name, hazard class & division, packing group) is shown for each mode of transportation. Additional descriptive information may be required by 49 CFR, IATA/ICAO, IMDG and the CTDGR.

14.1	49 CFR (GND):	UN1268, PETROLEUM DISTILLATES, N.O.S., 3, III (LTD QTY, IP VOL ≤ 5.0 L, OP MASS ≤ 30 kg); or CONSUMER COMMODITY, ORM-D (IP VOL ≤ 5.0 L, OP MASS ≤ 30 kg) – until 12/31/20	
14.2	IATA (AIR):	UN1268, PETROLEUM DISTILLATES, N.O.S., 3, III (LTD QTY, IP VOL ≤ 5.0 L, OP VOL ≤ 10 L); or ID8000, CONSUMER COMMODITY, 9 (LTD QTY, IP VOL ≤ 0.5 L, OP MASS ≤ 30 kg)	
14.3	IMDG (OCN):	UN1268, PETROLEUM DISTILLATES, N.O.S., 3, III (LTD QTY, IP VOL ≤ 5.0 L, OP MASS ≤ 30 kg)	
14.4	TDGR (Canadian GND):	UN1268, PETROLEUM DISTILLATES, N.O.S., 3, III (LTD QTY, IP VOL ≤ 5.0 L, OP MASS ≤ 30 kg)	
14.5	ADR/RID (EU):	UN1268, PETROLEUM DISTILLATES, N.O.S., 3, III (LTD QTY, IP VOL ≤ 5.0 L, OP MASS ≤ 30 kg); Transport Cat: 3; Tunnel Code: (D/E)	
14.6	SCT (MEXICO):	UN1268, DESTILADOS DE PETROLEO, N.E.P., 3, III (CANT. LTDA., IP VOL ≤ 5.0 L, OP MASS ≤ 30 kg)	
14.7	ADGR (AUS):	UN1268, PETROLEUM DISTILLATES, N.O.S., 3, III (LTD QTY, IP VOL ≤ 5.0 L, OP MASS ≤ 30 kg)	

15. REGULATORY INFORMATION

15.1	SARA Reporting Requirements:	This product contains 1,2,4-Trimethylbenzene, Benzene, Cumene, Cyclohexane, Ethylbenzene, Naphthalene, Toluene and Xylenes, substances subject to SARA Title III, Section 313 reporting requirements
15.2	SARA TPQ:	There are no specific Threshold Planning Quantities for the components of this product.
15.3	TSCA Inventory Status:	The components of this product are listed on the TSCA Inventory.
15.4	CERCLA Reportable Quantity:	Benzene: 10 lbs (4.54 kg); Cumene: 5,000 lbs (2,270 kg); Cyclohexane: 1,000 lbs (454 kg); Naphthalene: 100 lbs (45.4 kg); Xylenes: 100 lbs (45.4 kg); Ethylbenzene: 1,000 lbs (454 kg); Toluene: 1,000 lbs (454 kg)
15.5	Other Federal Requirements:	NA
15.6	Other Canadian Regulations:	This product has been classified according to the hazard criteria of the CPR and the SDS contains all of the information required by the CPR. The components of this product are listed on the DSL/NDSL. None of the components of this product are listed on the Priorities Substances List. WHMIS B2, D2B (Flammable Liquid, Other Toxic Effects). 
15.7	State Regulatory Information:	Toluene is listed on the following state criteria lists: California Proposition 65 (CA65), Delaware Air Quality Management List (DE), Florida Toxic Substances List (FL), Massachusetts Hazardous Substances List (MA), Michigan Critical Substances List (MI), Minnesota Hazardous Substances List (MN), New Jersey Right-to-Know List (NJ), New York Hazardous Substances List (NY), Pennsylvania Right-to-Know List (PA), Washington Permissible Exposures List (WA), and Wisconsin Hazardous Substances List (WI). Xylene is listed on the following state criteria list(s): FL, MA, MI, MN, NJ, PA, WA, WI. Ethylbenzene is listed on the following state criteria list(s): FL, MA, MN, PA, WA. 1,2,4-Trimethylbenzene is listed on the following state criteria list(s): MA, NJ, PA. 2-Ethylhexanol is listed on the following state criteria list(s): FL, MA, PA. 2-Ethylhexyl Nitrate is listed on the following state criteria list(s): NJ, PA. Benzene is listed on the following state criteria list(s): CA65, FL, MA, MN, NJ, PA, WA, WI. Cumene is listed on the following state criteria list(s): CA65, FL, MA, MN, NJ, PA, WA, WI. Cyclohexane is listed on the following state criteria list(s): FL, MA, MN, NJ, PA, WA, WI. Kerosene is listed on the following state criteria list(s): FL, MA, PA. Naphthalene is listed on the following state criteria list(s): CA65, FL, MA, MN, NJ, PA, WA, WI. Trimethylbenzene is listed on the following state criteria list(s): FL, MA, MN, PA, WA. No other ingredients in this product, present in a concentration of 1.0% or greater, are listed on any of the following state criteria lists: California Proposition 65 (CA65), Delaware Air Quality Management List (DE), Florida Toxic Substances List (FL), Massachusetts Hazardous Substances List (MA), Michigan Critical Substances List (MI), Minnesota Hazardous Substances List (MN), New Jersey Right-to-Know List (NJ), New York Hazardous Substances List (NY), Pennsylvania Right-to-Know List (PA), Washington Permissible Exposures List (WA), Wisconsin Hazardous Substances List (WI).
15.8	Other Requirements:	All components are either listed on the U.S. TSCA inventory or are not regulated under TSCA under 40 CFR § 720.30. Listed on AICS (Australian Inventory of Chemical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on KECI (Korean Existing Chemicals Inventory) New Zealand Inventory of Chemicals (NZIoC) Registration Status: CAS 8008-20-6: May be used as a single component chemical under an appropriate group standard CAS 27247-96-7: May be used as a single component chemical under an appropriate group standard CAS 64742-94-5: May be used as a single component chemical under an appropriate group standard CAS 91-20-3: HSR001287 CAS 64742-95-6: HSR001503 CAS 104-76-7: HSR001386 CAS 1330-20-7: HSR000983 CAS 25551-13-7: Maybe used as a component in a product covered by a group standard but it is not approved for use as a chemical in its own right CAS 95-63-6: HSR001382 CAS 108-88-3: HSR001227 CAS 100-41-4: May be used as a single component chemical under an appropriate group standard CAS 110-82-7: HSR001111 CAS 71-43-2: HSR001038 CAS 98-82-8: HSR001184 NZIoC Classification: 3.1C, 6.1D, 6.1E, 6.7A, 6.7B, 6.8B; Fuel Additives (Flammable, Toxic [6.7]) – HSR002584 Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) **WARNING**: This product can expose you to chemicals including naphthalene, ethylbenzene, benzene and cumene which are known to the State of California to cause cancer and toluene and benzene which are known to the State of California to cause reproductive harm.

16. OTHER INFORMATION

16.1	Other Information:	**DANGER! FLAMMABLE LIQUID AND VAPOR. MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. HARMFUL IF SWALLOWED OR IN CONTACT WITH SKIN. TOXIC IF INHALED. MAY CAUSE GENETIC DEFECTS. MAY CAUSE CANCER. SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD. MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.** Obtain special instructions. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical, ventilating, lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing fumes, mist, vapor or spray. Wash affected areas thoroughly after handling. Wash hands and exposed skin areas with soap and warm water thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves, protective clothing, eye protection, face protection. If swallowed: Immediately call a poison control center, doctor/physician. If on skin: Wash with plenty of soap and water. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If exposed or concerned: Get medical advice/attention. Call a POISON CONTROL CENTER, doctor, if you feel unwell. Get medical advice/attention if you feel unwell. Specific treatment: See section 4.1 of the Safety Data Sheet. Rinse mouth. Do NOT induce vomiting. Take off contaminated clothing and wash it before reuse. In case of fire: Use CO_2, foam, dry powder or water spray to extinguish. Store in a well-ventilated place. Keep cool. Store locked up. **KEEP OUT OF REACH OF CHILDREN**. ⚠ **WARNING**: This product can expose you to chemicals including naphthalene, ethylbenzene, benzene and cumene which are known to the State of California to cause cancer and toluene and benzene which are known to the State of California to cause reproductive harm.

16. OTHER INFORMATION – cont'd

16.2	Terms & Definitions:	See last page of this Safety Data Sheet.	
16.3	Disclaimer:	This Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR §1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of ShipMate's, Smarter Sorting's & Petra Oil Company's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness is not guaranteed and no warranties of any type, either expressed or implied, are provided. The information contained herein relates only to the specific product(s). If this product(s) is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.	
16.4	Prepared for:	**Petra Oil Company** 50 Jacobs Lane Ngaruawahia 3792, New Zealand Tel: +64 (21) 771 703 Email: agacita@petraoilco.com	
16.5	Prepared by:	**Smarter Sorting** 2900 E. Cesar Chavez Street Austin, TX 78702 USA Tel: +1 (512) 593-2594 E-mail: support@smartesorting.com https://www.smartersorting.com	

DEFINITION OF TERMS

A large number of abbreviations and acronyms appear on a SDS. Some of these that are commonly used include the following:

GENERAL INFORMATION:

CAS No.	Chemical Abstract Service Number
RTECS No.	Registry of Toxic Effects of Chemical Substances Number
EINECS No.	European Inventory of Existing Commercial Chemical Substances Number

EXPOSURE LIMITS IN AIR:

ACGIH	American Conference on Governmental Industrial Hygienists
IDLH	Immediately Dangerous to Life and Health
NOHSC	National Occupational Health and Safety Commission (Australia)
OSHA	U.S. Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weighted Average

FIRST AID MEASURES:

CPR	Cardiopulmonary resuscitation - method in which a person whose heart has stopped receives manual chest compressions and breathing to circulate blood and provide oxygen to the body.

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: HMIS

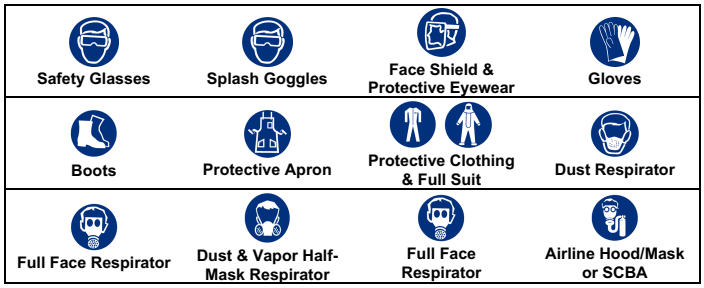
HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

0	Minimal Hazard
1	Slight Hazard
2	Moderate Hazard
3	Severe Hazard
4	Extreme Hazard

HEALTH
FLAMMABILITY
PHYSICAL HAZARDS
PERSONAL PROTECTION

PERSONAL PROTECTION RATINGS:

A	
B	
C	
D	
E	
F	
G	
H	
I	
J	
K	
X	**Consult your supervisor or SOPs for special handling directions.**



OTHER STANDARD ABBREVIATIONS:

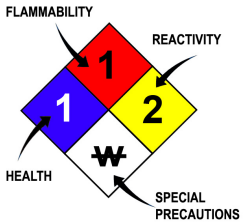
Carc	Carcinogenic
Irrit	Irritant
NA	Not Available
NR	No Results
ND	Not Determined
NE	Not Established
NF	Not Found
SCBA	Self-Contained Breathing Apparatus
Sens	Sensitization
STOT RE	Specific Target Organ Toxicity – Repeat Exposure
STOT SE	Specific Target Organ Toxicity – Single Exposure

NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

FLAMMABILITY LIMITS IN AIR:	
Autoignition Temperature	Minimum temperature required to initiate combustion in air with no other source of ignition
LEL	Lower Explosive Limit - lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source
UEL	Upper Explosive Limit - highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source

HAZARD RATINGS:

0	Minimal Hazard
1	Slight Hazard
2	Moderate Hazard
3	Severe Hazard
4	Extreme Hazard
ACD	Acidic
ALK	Alkaline
COR	Corrosive
W	Use No Water
OX	Oxidizer
TREFOIL	Radioactive



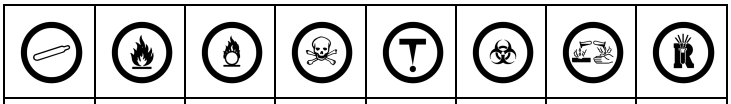
TOXICOLOGICAL INFORMATION:

LD_{50}	Lethal Dose (solids & liquids) which kills 50% of the exposed animals
LC_{50}	Lethal concentration (gases) which kills 50% of the exposed animal
ppm	Concentration expressed in parts of material per million parts
TD_{lo}	Lowest dose to cause a symptom
TCLo	Lowest concentration to cause a symptom
TD_{lo}, LD_{lo}, & LD_o or TC, TC_o, LC_{lo}, & LC_o	Lowest dose (or concentration) to cause lethal or toxic effects
IARC	International Agency for Research on Cancer
NTP	National Toxicology Program
RTECS	Registry of Toxic Effects of Chemical Substances
BCF	Bioconcentration Factor
TL_m	Median threshold limit
log Kow or log Koc	Coefficient of Oil/Water Distribution

REGULATORY INFORMATION:

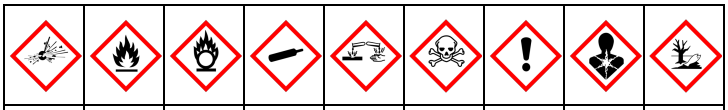
WHMIS	Canadian Workplace Hazardous Material Information System
DOT	U.S. Department of Transportation
TC	Transport Canada
EPA	U.S. Environmental Protection Agency
DSL	Canadian Domestic Substance List
NDSL	Canadian Non-Domestic Substance List
PSL	Canadian Priority Substances List
TSCA	U.S. Toxic Substance Control Act
EU	European Union (European Union Directive 67/548/EEC)
WGK	Wassergefährdungsklassen (German Water Hazard Class)

WORKPLACE HAZARDOUS MATERIALS IDENTIFICATION (WHMIS) SYSTEM:



Class A	Class B	Class C	Class D1	Class D2	Class D3	Class E	Class F
Compressed	Flammable	Oxidizing	Toxic	Irritation	Infectious	Corrosive	Reactive

CLP/GHS (1272/2008/EC) PICTOGRAMS:



GHS01	GHS02	GHS03	GHS04	GHS05	GHS06	GHS07	GHS08	GHS09
Explosive	Flammable	Oxidizer	Pressurized	Corrosive	Toxic	Harmful Irritating	Health Hazard	Environment