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:	**PETRABLASTER**
1.2	Chemical Name:	Aerosol
1.3	Synonyms:	9017
1.4	Trade Names:	Petrablaster
1.5	Product Use:	Adhesive
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! EXTREMELY FLAMMABLE AEROSOL. PRESSURIZED CONTAINER: MAY BURST IF HEATED. CAUSES SKIN IRRITATION AND SERIOUS EYE IRRITATION. MAY CAUSE DROWSINESS OR DIZZINESS. SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD. MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE. TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.

Classification: Aerosols 1, Acute Tox. (inh), Skin Irrit. 2, Eye Irrit. 2A, Repr. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1

2.2 Label Elements:

Hazard Statements (H): H222 – Extremely Flammable aerosol. H229 - Pressurized container: may burst if heated. H304 – May be fatal if swallowed and enters airways. H315 - Causes skin irritation. H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness. H361 - Suspected of damaging fertility or the unborn child. H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements (P): P102 – Keep out of reach of children. P103 – Read label before use. 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. P211 - Do not spray on an open flame or other ignition source. P251 - Pressurized container: Do not pierce or burn, even after use. P260 - Do not breathe fumes/mist/vapor/spray. P264 - Wash affected areas thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. 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. P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 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 on SDS. P322 - Specific treatment (see supplemental first aid instruction on this label). P331 – Do NOT induce vomiting. P332+P313 - If skin irritation occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P403+P233 - Store in a well-ventilated place. Keep container tightly closed. P405 - Store locked up. P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. 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**.

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
ACETONE	67-64-1	AL3150000	200-662-2	20-40	500	750	(500)	1185	NF	1000	NA	2500	590 NIOSH
	Flam. Liq. 2; Eye Irrit. 2; STOT SE 3; H225, H319, H336; HSNO: HSR001070												
BUTANE	106-97-8	EJ4200000	203-448-7	10-20	1000	900	(800)	1900	NF	800	900	NA	
	Press. Gas, Flam. Gas 1; H220; HSNO: HSR000989												
PROPANE	74-98-6	TX2275000	203-448-7	10-20	1000	NA	NF	NF	NF	1000	NA	2100	
	Press. Gas, Flam. Gas 1; H220; HSNO: HSR001010												
2-METHYLPENTANE	107-83-5	NA	203-523-4	2.5-10	NA	NA	(500)	1760	NF	NA	NA	NA	
	Flam. Liq. 2, Skin Irrit. 2, Asp. Tox. 1, STOT SE 3, Aquatic Chronic 2; H225, H315, H304, H336, H411												
n-HEXANE	110-54-3	MN9275000	203-769-2	2.5-10	50	1000	(20)	72	NF	500	NA	1100	50 NIOSH
	Flam. Liq. 2, Skin Irrit. 2, Repr. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1, Aquatic Acute 2, Aquatic Chronic 2; H225, H315, H361, H336, H373, H304, H401, H411; HSNO HSR001166												
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												

4. FIRST AID MEASURES

4.1	First Aid:	Ingestion:	Rinse mouth. 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:	Remove contact lenses, if present and easy to do. Continue rinsing. 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:	Repeated exposure to this material can result in absorption through skin causing significant health hazard. Toxic in contact with skin. Causes skin irritation.
		Inhalation:	Vapors of this product may be moderately irritating to the nose, throat and other tissues of the respiratory system. Symptoms of overexposure can include coughing, wheezing, nasal congestion, and difficulty breathing. Inhalation of concentrated vapors can cause central nervous system depression (e.g., drowsiness, dizziness, headaches, nausea). Odor may give some warning of exposure, but odor fatigue may occur.
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.
		Inhalation:	Shortness of breath. May cause drowsiness or dizziness.
4.4	Acute Health Effects:	Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard. 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 damaging fertility or the unborn child. Causes damage to organs. Repeated or prolonged skin contact may produce irritation and dermatitis. Overexposure to this material or its components may cause damage to liver, kidney and nervous system. Over exposure to solvents has been associated to permanent damage to brain and nervous system according to reports. Deliberated ingestion or inhalation of this product can be dangerous or fatal. Use of alcoholic beverages enhances toxic effects.	
4.6	Target Organs:	Eyes, Skin, Lungs	
4.7	Medical Conditions Aggravated by Exposure:	Persons with pre-existing skin disorders or impaired pulmonary, kidney or liver function may be more susceptible to the effects of this product.	

HEALTH	**2**
FLAMMABILITY	**4**
PHYSICAL HAZARDS	**0**
PROTECTIVE EQUIPMENT	**B**

EYES	**SKIN**	**LUNGS**

5. FIREFIGHTING MEASURES

5.1	Fire & Explosion Hazards:	**WARNING! EXTREMELY FLAMMABLE AEROSOL**. Level 1 Aerosol (NFPA 30B). Aerosols may burst at temperatures above 120 °F. Cool uninvolved containers to prevent possible bursting. Aerosols may be projectile hazards when bursting. If aerosols are bursting, stay clear until bursting is complete. Containers may rupture and release flammable liquids or/or exposed gases if exposed to the heat of fire. Keep containers cool by spraying them with water until the fire has been extinguished. Keep away from heat, lit cigarettes, sparks & open flame. Keep container closed. When exposed to high temperatures, may produce hazardous decomposition products such as oxides of carbon (e.g., CO, CO_2) and nitrogen (e.g., NO_x) and smoke.
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 in any fire, wear MSHA/NIOSH approved self-contained breathing apparatus (pressure-demand) and full protective gear. 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. Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies.

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. Pressurized container: Do not pierce or burn, even after use. Store containers in a cool, dry location, away from direct sunlight, other light sources, or sources of intense heat. Storage temperature: 32-120 ºF (0-49 ºC). Take precautionary measures against static discharge. Store away from incompatible materials (see Section 10).
7.3	Special Precautions:	Do not breathe fumes/mist/vapors/spray.

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	
n-HEXANE	50	1000	(20)	72	NF	500	NA	1100	50 NIOSH
ACETONE	500	750	(500)	1185	NF	1000	NA	2500	590 NIOSH
BUTANE	1000	900	(800)	1900	NF	800	900	NA	
PROPANE	1000	NA	NF	NF	NF	1000	NA	2100	
TOLUENE	50	300	(50)	191	NF	200	300	500	

8.2	Ventilation & Engineering Controls:	When working with large quantities of product, provide adequate ventilation (e.g., local exhaust ventilation, fans), to keep exposure below the airborne exposure limits. Ensure that an eyewash station, sink or washbasin is available in case of exposure to eyes.	
8.3	Respiratory Protection:	No special respiratory protection is required under typical circumstances of use or handling. If necessary, use only respiratory protection authorized per U.S. OSHA's requirement in 29 CFR §1910.134, or applicable U.S. state regulations, or the appropriate standards of Canada, its provinces, E.C. member states, or Australia.	
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.	
8.5	Hand Protection:	If anticipated that prolonged & repeated skin contact will occur during use of this product, wear latex or rubber gloves for routine industrial use. If necessary, refer to U.S. OSHA 29 CFR §1910.138, the appropriate standards of Canada, of the E.C. member states.	
8.6	Body Protection:	No special body protection is required under typical circumstances of use and handling. Wear appropriate protective clothing to prevent skin contact, (boots, lab coat, apron, coveralls) as needed. If necessary, refer to appropriate standards of Canada, the E.C. member states, or U.S. OSHA.	

9. PHYSICAL & CHEMICAL PROPERTIES

9.1	Appearance:	Aerosol. Pale yellow liquid.
9.2	Odor:	Strong solvent odor.
9.3	Odor Threshold:	NA
9.4	pH:	NA
9.5	Melting Point/Freezing Point:	NA
9.6	Initial Boiling Point/Boiling Range:	56.05 °C (132.89 °F)
9.7	Flashpoint:	-104.4 °C (-156.0 °F)
9.8	Upper/Lower Flammability Limits:	LEL: 2.2%; UEL: 10.1%
9.9	Vapor Pressure:	50-70 psig @ 70 °F, estimated
9.10	Vapor Density:	NA
9.11	Relative Density:	0.53 estimated
9.12	Solubility:	Not soluble
9.13	Partition Coefficient (log P_{ow}):	NA

9. PHYSICAL & CHEMICAL PROPERTIES

9.14	Autoignition Temperature:	341.29 °C (646.31 °F)
9.15	Decomposition Temperature:	NA
9.16	Viscosity:	< 15 cPs
9.17	Other Information:	VOC: 63.54% estimated

10. STABILITY & REACTIVITY

10.1	Stability:	Flammable aerosol. Contains gas under pressure; may explode if heated. Extreme risk of explosion by shock, friction, fire or other sources of ignition; however, relatively stable under ambient conditions when stored properly.
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 to, or contact with, extreme temperatures, incompatible chemicals, direct sunlight, 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. n-Hexane – LD_{50} (oral, rat): 28,710 mg/kg; LD_{50} (dermal, rabbit) 3,000 mg/kg; LC_{50} (inh, rat, 4h) 48,000 ppm; Acetone – LD_{50} (oral, rat): 8,450 mg/kg; LD_{50} (dermal, rabbit) > 20,000 mg/kg; LC_{50} (inh, rat, 4h) > 76.0 mg/L; Butane: LC_{50} (inh, rat, 4h): 68,000 ppm; Propane: LC_{50} (inh, rat, 4h): 800,000 ppm; 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 cause drowsiness and dizziness. Causes skin irritation. Causes serious eye irritation. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways. Narcotic effects. Use of alcoholic beverages enhances toxic effects. Deliberate ingestion or inhalation of this product can be dangerous or fatal.
11.4	Chronic Toxicity:	May cause damage to organs through prolonged or repeated exposure. Repeated or prolonged skin contact may produce irritation and dermatitis. Persons with pre-existing skin disorders or impaired pulmonary, kidney or liver function may be more susceptible to the effects of this product. Suspected of damaging fertility. Suspected of damaging the unborn child.
11.5	Suspected Carcinogen:	The following substance(s) is/are listed on the IARC Group 3 list (Not Classifiable as to its Carcinogenicity to Humans): Toluene.
11.6	Reproductive Toxicity:	Toluene is suspected of damaging fertility or the unborn child and is listed on the California Prop 65 (reproductive) list.
	Mutagenicity:	Liquefied Petroleum Gas is listed as a suspected mutagen.
	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:	Toluene is suspected of damaging fertility or the unborn child and is 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:	In general, gastric emptying is not indicated except in very select cases where a history of a recent large ingestion is obtained. Activated Charcoal: administer charcoal as a slurry (240 ml water/30 g charcoal). Usual dose: 25 to 100 g in adults/adolescents, 25 to 50 g in children (1 to 12 years), and 1 g/kg in infants less than 1 year old. In symptomatic patients (coughing, choking, tachypnea, etc.), monitor pulse oximetry and blood gases to assure adequate ventilation and obtain a baseline chest x-ray. Determine vital signs regularly. Admit the patient for observation. Acute lung injury: maintain ventilation and oxygenation and evaluate with frequent arterial blood gas or pulse oximetry monitoring. Early use of peep and mechanical ventilation may be needed.

12. ECOLOGICAL INFORMATION

12.1	Environmental Stability:	Terrestrial Fate: Based on a classification scheme, an estimated K_{oc} value of 150, determined from a structure estimation method, indicates that n-hexane is expected to have high mobility in soil. Volatilization of n-hexane from moist soil surfaces is expected to be an important fate process given an estimated Henry's Law constant of 1.83 atm-cu m/mole, determined from its vapor pressure of 153 mm Hg and water solubility of 9.5 mg/l. The potential for volatilization of n-hexane from dry soil surfaces may exist based upon its vapor pressure. Screening studies have shown that n-hexane is biodegradable under aerobic conditions, and these studies suggest that this compound will biodegrade in soil; however, volatilization from soil is expected to be the dominant environmental fate process of n-hexane. Atmospheric Fate: According to a model of gas/particle partitioning of semi-volatile organic compounds in the atmosphere, propane, which has a vapor pressure of 7150 mm Hg at 25 deg C, is expected to exist solely as a gas in the ambient atmosphere. Gas-phase propane is degraded in the atmosphere by reaction with photochemically-produced hydroxyl radicals; the half-life for this reaction in air is estimated to be 14 days, calculated from its rate constant of 1.15×10^{-12} cu cm/molecule-sec at 25 deg C. Propane does not contain chromophores that absorb at wavelengths >290 nm and therefore is not expected to be susceptible to direct photolysis by sunlight. Partition Coefficient n-Octanol/Water (Log P_{ow}): 2-Methylpentane: 3.74; Acetone: -0.24; Butane: 2.89; n-Hexane: 3.9; Propane: 2.36; Toluene: 2.73.

12. ECOLOGICAL INFORMATION

12.2	Effects on Plants & Animals:	According to a classification scheme, an estimated BCF of 200, from a log K_{ow} of 3.90 and a regression-derived equation, suggests the potential for bioconcentration in aquatic organisms is high. Screening studies have shown that n-Hexane is biodegradable under aerobic conditions, and these studies suggest that this compound will biodegrade in water; however, volatilization from water surfaces is expected to be the dominant environmental fate process of n-hexane. Atmospheric Fate: according to a model of gas/particle partitioning of semi-volatile organic compounds in the atmosphere, n-Hexane, which has a vapor pressure of 153 mm Hg at 25 °C, is expected to exist solely as a vapor in the ambient atmosphere. Vapor phase n-Hexane is degraded in the atmosphere by reaction with photochemically produced hydroxyl radicals; the half-life for this reaction in air is estimated to be 3 days, calculated from its rate constant of 5.61 x 10^{-12} cu cm/molecule-sec at 25 °C.
12.3	Effects on Aquatic Life:	n-Hexane: LC_{50} (Pimephales promelas, 96h): 25 mg/L; EC_{50} (Daphnia magna, 48h): 50 mg/L; Acetone: LC_{50} (Oncorhynchus mykiss, 96h): 5,540 mg/L; EC_{50} (Daphnia magna, 48h): 10 mg/L; Toluene: LC_{50} (Lepomis macrochirus, 96h): 17.0 mg/L; EC_{50} (Daphnia magna, 48h): 313 mg/L. Aquatic Fate: based on a classification scheme an estimated K_{oc} value of 150, determined from a structure estimation method, indicates that n-Hexane is not expected to adsorb to suspended solids and sediment. Volatilization from water surfaces is expected based upon an estimated henry's law constant of 1.83 atm-cu m/mole, determined from a vapor pressure of 153 mm Hg and water solubility of 9.5 mg/l. Using this henry's law constant and an estimation method, volatilization half-lives for a model river and model lake are 1 hour and 3 days, respectively.

13. DISPOSAL CONSIDERATIONS

13.1	Waste Disposal:	Review current local, state and federal laws, codes, statutes and regulations to determine current status and appropriate disposal method for the ingredients listed in Section 3. 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:	Aerosols may be managed as Universal Waste in some states (e.g., CA, CO, MN, etc.). Contact the federal, state or provincial environmental authority to determine suitability for recycling and or proper disposal requirements. U.S. EPA RCRA Characteristic Waste (Ignitable): D001

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):	UN1950, AEROSOLS, 2.1 (LTD QTY, IP VOL ≤ 1.0 L); or CONSUMER COMMODITY, ORM-D (IP VOL ≤ 1.0 L) – until 12/31/20	
14.2	IATA (AIR):	UN1950, AEROSOLS, FLAMMABLE, 2.1 (LTD QTY, IP VOL ≤ 500 mL); or ID8000, CONSUMER COMMODITY, 9 (IP VOL ≤ 500 mL)	 or
14.3	IMDG (OCN):	UN1950, AEROSOLS, 2.1 (LTD QTY, IP VOL ≤ 1.0 L)	
14.4	TDGR (Canadian GND):	UN1950, AEROSOLS, 2.1 (LTD QTY, IP VOL ≤ 1.0 L)	
14.5	ADR/RID (EU):	UN1950, AEROSOLS, 2.1 (LTD QTY, IP VOL ≤ 1.0 L); Transport Cat: 2; Tunnel Code: (D)	
14.6	SCT (MEXICO):	UN1950, AEROSOLES, 2.1 (CANT. LTDA., IP VOL ≤ 1.0 L)	
14.7	ADGR (AUS):	UN1950, AEROSOLS, 2.1 (LTD QTY, IP VOL ≤ 1.0 L)	

15. REGULATORY INFORMATION

15.1	SARA Reporting Requirements:	This product contains Toluene, a substance 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:	Acetone: 5,000 lbs (2,270 kg); Toluene: 1,000 lbs (454 kg); n-Hexane: 5,000 lbs (2,270 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 B5, D2B (Flammable Aerosol, Other Toxic Effects). 

15. REGULATORY INFORMATION – cont'd

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). n-Hexane is listed on the following state criteria list(M): 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. REGULATORY INFORMATION – cont'd

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 67-64-1: HSR000983 CAS 106-97-8: HSR000989 CAS 74-98-6: HSR001010 CAS 110-54-3: HSR001166 CAS 108-88-3 HSR001227 NZIoC Classification: 2.1.2A, 6.1D, 6.1E, 6.3B, 6.4A, 6.8B; Aerosols (Flammable) – HSR002515 Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) **WARNING**: This product can expose you to chemicals including Toluene which is known to the State of California to cause reproductive harm.

16. OTHER INFORMATION

16.1	Other Information:	**DANGER! EXTREMELY FLAMMABLE AEROSOL. PRESSURIZED CONTAINER: MAY BURST IF HEATED. CAUSES SKIN IRRITATION AND SERIOUS EYE IRRITATION. MAY CAUSE DROWSINESS OR DIZZINESS. SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD. MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not breathe gas. Wash 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 center/doctor. Do NOT induce vomiting. If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. **KEEP OUT OF REACH OF CHILDREN**. **WARNING**: This product can expose you to chemicals including Toluene which is known to the State of California to cause reproductive harm.
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

15. REGULATORY INFORMATION – cont'd

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 67-64-1: HSR000983 CAS 110-54-3: HSR001166 CAS 8042-47-5: Maybe used as a single component chemical under an appropriate group standard CAS 67476-85-7 HSR001009 NZIoC Classification: 2.1.2A, 6.1D, 6.1E, 6.3B, 6.4A, 6.8B; Aerosols (Flammable) – HSR002515 Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) **WARNING**: This product can expose you to chemicals including Toluene which is known to the State of California to cause reproductive harm.

16. OTHER INFORMATION

16.1	Other Information:	**DANGER! EXTREMELY FLAMMABLE AEROSOL. PRESSURIZED CONTAINER: MAY BURST IF HEATED. CAUSES SKIN IRRITATION AND SERIOUS EYE IRRITATION. MAY CAUSE DROWSINESS OR DIZZINESS. SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD. MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not breathe gas. Wash 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 center/doctor. Do NOT induce vomiting. If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. **KEEP OUT OF REACH OF CHILDREN**. **WARNING**: This product can expose you to chemicals including Toluene which is known to the State of California to cause reproductive harm.
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16.4	Prepared for:	**Petra Oil Company** 11085 Regency Green Drive Cypress, TX 77429 USA Tel: +1 (713) 856-5700 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

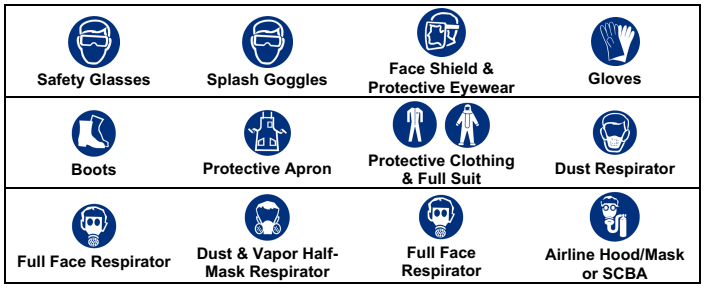
HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

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:

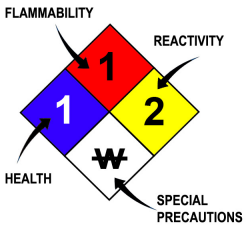
Carc	Carcinogenic
Irrit	Irritant
NA	Not Available
NR	No Results
ND	Not Determined
NE	Not Established
NF	Not Found
SCBA	Self-Contained Breathing Apparatus
Sens	Sensitization
STOT RE	Specific Target Organ Toxicity – Repeat Exposure
STOT SE	Specific Target Organ Toxicity – Single Exposure

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



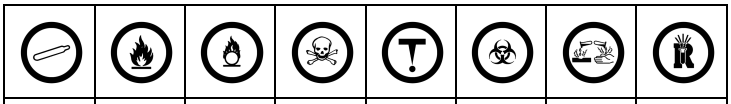
TOXICOLOGICAL INFORMATION:

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:

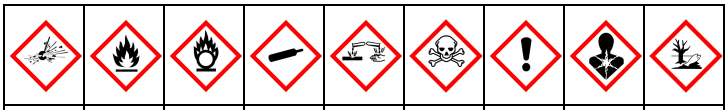
WHMIS	Canadian Workplace Hazardous Material Information System
DOT	U.S. Department of Transportation
TC	Transport Canada
EPA	U.S. Environmental Protection Agency
DSL	Canadian Domestic Substance List
NDSL	Canadian Non-Domestic Substance List
PSL	Canadian Priority Substances List
TSCA	U.S. Toxic Substance 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