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Prepared to OSHA, ACC, ANSI, WHSR, WHMIS, GHS & EU Standards

SDS Revision: 1.1

		1.	PRODUC	T & CON	IPANY	IDE	NTIF		ΤΙΟΙ	N				
1.1	Product Name:	PETRA	R-134a R	EFRIGE	RANT v	vith I	ICE3	32 ar	nd D	YE				
1.2	Chemical Name:	Tetrafluoro	ethane											
1.3	Synonyms:	9021												
1.4	Trade Names:	Petra R-134a Refrigerant with ICE32 and Dye												
1.5	Product Use:	Refrigerant												
1.6	Distributor's Name:	Petra Oil N	Z											
1.7	Distributor's Address:	50 Jacobs	Lane, Ngaruawa	ahia 3792, Nev	w Zealand									
1.8	Emergency Phone:	NZ NA	TIONAL P	OISONS	CENTR	E (0	800) 764	766	;				
1.9	Business Phone / Fax:	Tel: +64 (2	1) 771 703		-									
			2 H			IFIC	ΔΤΙά	2N						
2.1	Hazard Identification:	This produ	uct is classifier					E and	as D			600		cording to the
		classificatio	on criteria of WH	SR and ADG	Code (Aus	tralia)	ANCI		as D	ANGE	ROUS	900		cording to the
		DANGER	PRESSURIZEI			IRST I	F HFA	TED O	CAUSE	S MII	D SKI	N IRR		N
		Classificati	on: Gases unde	r Pressure (co	mpressed	das) S	Skin Irr	it. 2						
2.2	Label Elements:	Hazard Sta	itements (H) [.] H	280 – Contain	is das und	er pres	sure:	mav ex	nlode	if heat	ed H	316 - (Causes	
		mild skin in	itation.	200 Oomain	lo guo una		ouro.	indy on	piedo	ii noat		010	00000	
		Precaution	arv Statements	(P): P264 - \	Nash affeo	ted are	eas th	orouah	lv afte	r hanc	llina.	P280 -	- Wear	
		protective	gloves/protective	e clothing/eye	protection	/face p	orotect	ion. P	410+P	403+F	·412 -	Protec	ct from	
		sunlight. S	tore in a well-v	entilated place	e. Do not	expose	e to te	empera	tures	excee	ding 5	0 °C/1	22 °F.	
		P501 - Dis	pose of content	s/container to	appropria	te was	te disp	oosal fa	acility,	in acc	ordano	ce with	n local,	
		regional, na	ational, internation	onal regulation	IS.									
		-		-										
2.3	Other Warnings:	Inhalation i	n high concentr	ations may ca	use respir	atory ir	ritatio	n and C	CNS de	epress	ion. Va	apor s	pray ma	y cause freeze
		burns. KEE	P OUT OF REA	ACH OF CHIL	DREN.									
					_			-						
		3. C	OMPOSIT	ION & IN	GREDI	ENT	INF	ORN	ΙΑΤΙ	ON				
									EXPO	SURE L	MITS IN	AIR (mg	g/m³)	
						AC	GIH		NOHSC		OSHA		۱	
						pp	om		ppm			ppm	r	
CUEM			DTECS No.		0/	T 1 V	OTEL	ES-	ES-	ES-	DEL	OTEL		OTUED
CHEIMI	CAL NAME(S)	811-97-2	KI8842500	212-377-0	30-70	NA	NA	(1000)	4240	NF	NA	NA	NA	UTHER
1,1,1,2	2-TETRAFLUOROETHANE	Press. Gas (Compressed Gas): H280	0010	10.0		(1000)	1210			107		
PROP	RIETARY ADDITIVE	NA	NA	NA	30-70	NA	NA	NF	NF	NF	NA	NA	NA	
MIXTU	JRE				1									
PROP	RIETARY INGREDIENTS	NA	NA	NA	0-40	NA	NA	NF	NF	NF	NA	NA	NA	
עם עו ו	/E	NA	NA	NA	≤ 0.1	NA	NA	NF	NF	NF	NA	NA	NA	
0001														
			4.	FIRST A		1201	KE2							
4.1	First Aid:	Ingestion:	Rinse mout	n. DO NOT I	NDUCE \	OMITI	NG.	Contac	ct Pois	son C	ontrol	Cente	r or loo	cal emergency
			telephone n	umber for ass	istance an	d instr	uction	s. If y	ou fee	lunwe	ell, see	ek med	dical ad	vice (show the
			label where	possible). If vo	omiting occ	urs sp	ontane	eously,	keep	victim'	s head	lower	ed (forv	ard) to reduce
		_	the risk of as	piration.										
		Eyes:	Remove cor	itact lenses, if	present a	nd eas	sy to c	lo. Cor	ntinue	rinsing	g. If pro	oduct g	gets in t	he eyes, flush
			eyes thoroug	shly with copic	ous amoun	ts of w	ater fo	r at lea	ast 15	minute	es, holo	ding ey	/elid(s)	open to ensure
			complete flu	shing. If the	eyes or fa	ce bec	ome s	wollen	during	g or fo	llowing	j use,	consult	a physician or
			emergency r	oom immediat	ely.									
		<u>Skin</u> :	Remove cor	ntaminated clo	thing and	wash	affecte	ed area	as with	i soap	and v	vater.	If disc	omfort persists
			and/or the s	kin reaction w	orsens, co	ntact a	a phys	ician ir	nmedia	ately.	Do not	wear	contam	inated clothing
		1	until after it h	as been prope	erly cleane	d.								
		Inhalation:	Remove vict	im to fresh a	ir at once	. Und	ler ext	treme o	conditi	ons, if	breat	hing s	tops, pe	erform artificial
			respiration.	Seek immedia	te medical	attenti	on.							



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	4. FIRST AID MEASURES – cont'd								
4.2	Effects of Exposure: Symptoms of Overexposure:	Ingestion: Not an expected route of exposure. If swallowed, irritation to the gastrointestinal tract. 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: 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). Ingestion: Nausea, intestinal discomfort, vomiting and/or diarrhea.							
4.4	Acute Licelik Effects	<u>Eyes</u> : <u>Skin</u> : Inhalation:	Overexposure in eye Symptoms of skin ov Shortness of breath.	es may cause redno verexposure may in <u>May cause drowsi</u>	ess, itching and include redness, i ness or dizzines	watering. itching, and ss.	irritation of a	ffected areas.	
4.4	Acute Health Effects:	Moderate in drowsiness,	tation to eyes and s dizziness, headaches	skin near affected and nausea.	areas. Additio	onally, high	concentratio	ons of vapors c	an cause
4.5	Chronic Health Effects:	Prolonged o	repeated exposure to	o skin causes defat	ting and dermati	itis.			
4.6	Target Organs:	Eyes, Skin, I	ungs						
4.7	Medical Conditions Aggravated by Exposure:	Pre-existing	skin, eye, or respirato	ry disorders.		HEALTH			1
	by Exposure:					FLAMM	ABILITY		0
						PHYSIC	AL HAZARI	DS	0
						PROTEC		PMENT	B
						EVES			
						ETES	SKIN	LUNGS	
		1	J. FIREFI		ASURES				
5.2	Extinguishing Methods:	WARNING! PRESSURIZED CONTAINER: MAY EXPLODE IF HEATED. Contents under pressure. Exposure to high heat may cause them to rupture with violent force. Containers may burst at temperatures above 120 °F. 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), hydrogen fluoride, fluorinated hydrocarbons, and oxides of fluorine. Use media appropriate for surrounding fire.							
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.							
						DEC			
6.1	6. ACCIDENTAL KELEASE MEASURES 6.1 Spills: Before cleaning any spill or leak, individuals involved in spill cleanup must wear appropriate Personal Protective Equipment (PPE) including safety glasses or goggles and gloves to avoid skin and eye contact. Ensure ventilation to avoid inhalation. Use caution, as large amounts of liquid may produce a slip hazard. Stop the flow of material, if this is without risk. If can is leaking, place into pail or bucket in well-ventilated area until pressure has dissipated. Absorb with inert absorbent such as dry clay, sand, diatomaceous earth, or commercial sorbents. Shovel into appropriate container for disposal. Absorb spill with inert material. Shovel material into appropriate container for disposal.								
		7.	HANDLING 8	& STORAGE	INFORMA	TION			
7.1	Work & Hygiene Practices:	Avoid skin c aerosol. Cor	eye contact with this tents are under press	s material. Wash th ure, so do not punc	horoughly after l cture or incinerat	handling. U te cans, eve	se with ventil n when 'emp	ation, and do no ty.'	ot breathe
7.2	Storage & Handling:	Store in cool	well-ventilated place.	. Store out of sunlig	ght, at temperatu	ires below 1	20°F.		
7.3	Special Precautions: Do not breathe fumes/mist/vapors/spray.								



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	8. EXPOSURE CONTROLS & PERSONAL PROTECTION										
8.1	Exposure Limits:		AC	GIH		NOHSC			OSHA		OTHER
	ppm (mg/m ³)	CHEMICAL NAME(S)	ті у	STEI	ES.TWA	ES-	ES-	DEI	STEI		
		1.1.1.2-TETRAFLUOROETHANE	NA	NA	(1000)	4240	NF	NA	NA	NA	
8.2	Ventilation & Engineering	When working with large quantit	ties of pr	oduct, pr	ovide ade	quate ve	ntilation (e	e.g., loca	l exhaus	t ventila	tion, fans), to
	Controls:	keep exposure below the airborr	ne expos	ure limits	. Ensure	that an e	yewash st	ation, sir	ik or was	hbasin	is available in
		case of exposure to eyes.									
8.3	Respiratory Protection:	If ventilation is not sufficient to el	fectively	prevent l	ouildup of	vapor/mis	st/fume/du	st, appro	priate NI	OSH/M	SHA
		OSHA's requirement in 29 CER 8	roviaea. \$1910-13	If neces	icable 11.9	oniy res Sistate re	piratory p	or the a	autnoriz	ea per e stand	U.S. ards
		of Canada, its provinces, E.C. me	ember sta	ates, or A	ustralia.	<i>b. blate re</i>	guiutiono	, or the u	ppropriat	e stand	
8.4	Eye Protection:	Wear protective eyewear (e.g.,	safety g	lasses v	vith side-s	hield) at	all times	when ha	andling t	his proc	luct.
		Always use protective eyewear v	when clea	ning spill	s or leaks	•			-		
0.5	Hand Decto effect										
8.5	Hand Protection:	If anticipated that prolonged & r	epeated	skin cont	act will oc	cur durin	g use of t	this produ	LCT, Wear	imperv	ious
		appropriate standards of Canada	a. of the E	E.C. mem	ber states	ily, leiei	10 0.3. 0	311A 29	CER SIS	10.150,	
8.6	Body Protection:	No special body protection is re	quired u	nder typic	cal circum	stances o	of use and	handling	a. Wear	approp	riate
		protective clothing to prevent ski	n contac	t, (boots,	lab coat,	apron, co	veralls) a	s needed	. If nece	essary, i	efer
		to appropriate standards of Cana	ida, the E	.C. mem	ber states	, or U.S.	OSHA.				
			0 011								
0.4	A	9. PHISICAL				JPER	IIE9				
9.1	Appearance:	Bright yellow liquid in an aerosol	can.								
9.2	Odor:	None									
9.3	Odor Threshold:	NA									
9.4	рп. Molting Point/Froozing Point:										
9.6	Initial Boiling Point/Boiling	-28.5 C (-15.7 F)									
0.0	Range:	300 °C (572 °F)									
9.7	Flashpoint:	176 °C (348 °F)									
9.8	Upper/Lower Flammability Limits:	NA									
9.9	Vapor Pressure:	4268 mm Hg @ 20 °C									
9.10	Vapor Density:	3.3 (air=1.0)									
9.11	Relative Density:	1.086									
9.12	Solubility:	Negligible solubility in water.									
9.13	Partition Coefficient (log Pow):	NA									
9.14	Autoignition Temperature:	> 400 °C									
9.15	Decomposition Temperature:	NA									
9.16	Viscosity:	25 cPs @ 20 °C									
9.17	Other Information:	Evaporation Rate: >120 (n-butyla	acetate =	: 1.0)							
		10 674									
10.1	Stability:	This is a stable metarial Cantain				VIII	bootod to	tompore	huroo > 1	20 °⊏	
10.1	Hazardous Decomposition	Hezerdoue, combustion, products	s gas un	aludo og	ure; may e		heated to	tempera	othor by	20 F.	on fragmanta
10.2	Products:	along with HF and fluorinated by	drocarbo	uuue cai ns.		JAIUE, Ca		iue, and	other ny	Giegonia	on nayments,
10.3	Hazardous Polymerization:	n: Will not occur									
10.4	Conditions to Avoid:	Exposure to, or contact with e	xtreme	emperati	ures, inco	mpatible	chemicals	, direct	sunliaht.	strona	light sources.
		sparks, flame.									
10.5	Incompatible Substances:	Strong oxidizers, peroxides, chlo	rine or st	rong acid	s or alkalis	6.					



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	11. TOXICOLOGICAL INFORMATION						
11.1	Routes of Entry:	Inhalation: YES Absorption: YES	Ingestion:	NO			
11.2	Toxicity Data:	This product has NOT been tested on animals to obtain toxicology data. Toxicology data, for available for some of the components of the product and is presented below.	und in so	cientific literature, is			
		1,1,1,2-Tetrafluoroethane – LD ₅₀ (oral, rat): > 5,000 mg/kg; LD ₅₀ (dermal, rabbit): > 5,000 mg/	kg.				
11.3	Acute Toxicity:	Moderate irritation to eyes and skin near affected areas. Additionally, high concentrati drowsiness, dizziness, headaches and nausea.	ions of	vapors can cause			
11.4	Chronic Toxicity:	Prolonged or repeated exposure to skin causes defatting and dermatitis.					
11.5	Suspected Carcinogen:	NA					
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:	This product is not reported to produce reproductive toxicity in humans.					
11.7	Irritancy of Product:	See Section 4.2					
11.8	Biological Exposure Indices:	NE					
11.9	Physician Recommendations:	Treat symptomatically.					
	<u> </u>						
		12. ECOLOGICAL INFORMATION					
12.1	Environmental Stability:	Bioaccumulation and other routes of aquatic contamination are not expected to be c	ontributo	ory. None of the			
12.2	Effects on Plants & Animals:	There are no specific data available for this product. An environmental fate analysis has r specific product	not been	conducted on this			
12.3	Effects on Aquatic Life:	<u>1,1,1,2-Tetrafluoroethane</u> : LC ₅₀ (Oncorhynchus mykiss, 96h): 450 mg/L.					
		13. DISPOSAL CONSIDERATIONS					
13.1	Waste Disposal:	Dispose of in accordance with local, state, provincial and federal laws and regulations. Disp licensed treatment, storage or disposal facility (TSDF).	oosal mu	ust be through by a			
13.2	Special Considerations:	Contact the federal, state or provincial environmental authority to determine suitability for disposal requirements. U.S. EPA RCRA Characteristic Waste (Reactive): D003	or recyc	ling and or proper			
		14 TRANSPORTATION INFORMATION					
The h	pasic description (ID Number r	aroper shipping name, hazard class & division, packing group) is shown for each mode of transportation. Ar	ditional c	descriptive information			
may	be required by 49 CFR, IATA/I	CAO, IMDG and the CTDGR.					
14.1	49 CFR (GND):	UN1950, AEROSOLS, 2.2 (LTD QTY, IP VOL ≤ 1.0 L); or CONSUMER COMMODITY, ORM-D (IP VOL ≤ 1.0 L) – until 12/31/20		\diamond			
14.2	IATA (AIR):			$\langle \mathbf{n} \rangle$			
		UN1950, AEROSOLS, FLAMMABLE, 2.2 (LTD QTY, IP VOL ≤ 500 mL); or ID8000, CONSUMER COMMODITY, 9 (IP VOL ≤ 820 mL)		or Y			
14.3	IMDG (OCN):	UN1950, AEROSOLS, 2.2 (LTD QTY, IP VOL ≤ 1.0 L)	2	\bigcirc			
14.4	TDGR (Canadian GND):	UN1950, AEROSOLS, 2.2 (LTD QTY, IP VOL ≤ 1.0 L)		<u> </u>			
14.5	ADR/RID (EU):	UN1950, AEROSOLS, 2.2 (LTD QTY, IP VOL ≤ 1.0 L); Transport Cat: 3; Tunnel Code: (E)	2	\diamond			
14.6	SCT (MEXICO):	UN1950, AEROSOLES, 2.2 (CANT. LTDA., IP VOL ≤ 1.0 L)	2	<u> </u>			
14.7	ADGR (AUS):	UN1950, AEROSOLS, 2.2 (LTD QTY, IP VOL ≤ 1.0 L)	2	\diamond			
		15. REGULATORY INFORMATION					
15.1	SARA Reporting Requirements:	This product does not contain any substances subject to SARA Title III, Section 313 reporting	g require	ements.			
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:	NA					
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 contains all of the information required by the CPR. The components of this product are listed the DSL/NDSL. None of the components of this product are listed on the Priorities Substatist. WHMIS A. D2B (Compressed Gas, Other Toxic Effects).	SDS ed on ances				



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	15. REGULATORY INFORMATION – cont'd						
15.7	State Regulatory Information:	<u>1,1,1,2-Tetrafluoroethane</u> is listed on the follow No other ingredients in this product, present in state criteria lists: California Proposition 65 Substances List (FL), Massachusetts Hazard Minnesota Hazardous Substances List (MN), N List (NY), Pennsylvania Right-to-Know List (PA) Substances List (WI).	ving state criteria list(s): Minnesota Hazardous Substances List (MN). a concentration of 1.0% or greater, are listed on any of the following (CA65), Delaware Air Quality Management List (DE), Florida Toxic ous Substances List (MA), Michigan Critical Substances List (MI), lew Jersey Right-to-Know List (NJ), New York Hazardous Substances), Washington Permissible Exposures List (WA), Wisconsin Hazardous				
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 811-97-2: HSR001031 NZIoC Classification: 6.9A; Aerosols (Subsidiary Hazard) – HSR002519 Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)					
			ΟΡΜΑΤΙΩΝ				
16.1	Other Information:	DANGER! PRESSURIZED CONTAINER: MAY Contains gas under pressure: may explode if he handling. Wear protective gloves/protective clo well-ventilated place. Do not expose to tempe appropriate waste disposal facility, in accordance KEEP OUT OF REACH OF CHILDREN.	BURST IF HEATED. CAUSES MILD SKIN IRRITATION. ated. Causes mild skin irritation. Wash affected areas thoroughly after thing/eye protection/face protection. Protect from sunlight. Store in a eratures exceeding 50 °C/122 °F. Dispose of contents/container to e with local, regional, national, international regulations.				
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 accurate addition					
16.4	Prepared for:	Petra Oil Company 50 Jacobs Lane Ngaruawahia 3792, New Zealand Tel: +64 (21) 771 703 Email: <u>agacita@petraoilco.com</u>	PETRA				
16.5	Prepared by:	Smarter Sorting 2900 E. Cesar Chavez Street Austin, TX 78702 USA Tel: +1 (512) 593-2594 E-mail: <u>support@smartesorting.com</u> https://www.smartersorting.com	SORTING SORTING				



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REACTIVITY

SPECIAL PRECAUTIONS

Prepared to OSHA, ACC, ANSI, WHSR, WHMIS, GHS & EU Standards

SDS Revision: 1.1

SDS Revision Date: 12/14/2019

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 any discussion of the best of the stopped receives and the stopped
	and provide oxygen to the body.

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: HMIS

HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

0	Minimal Hazard	HEALTH
1	Slight Hazard	FLAMMABILITY
2	Moderate Hazard	PHYSICAL HAZARDS
3	Severe Hazard	PERSONAL PROTECTION
4	Extreme Hazard	

PERSONAL PROTECTION RATINGS:



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	
₩	Use No Water	HEALTH
ох	Oxidizer	
TREEOII	Padiaaatiwa	

TOXICOLOGICAL INFORMATION:

LD50	Lethal Dose (solids & liquids) which kills 50% of the exposed animals			
LC50	Lethal concentration (gases) which kills 50% of the exposed animal			
ppm	Concentration expressed in parts of material per million parts			
TD ₁₀	Lowest dose to cause a symptom			
TCLo	Lowest concentration to cause a symptom			
TDio, LDio, & LDo or	Lowest dose (or concentration) to cause lethal or toxic effects			
TC, TCo, LCIO, & LCo				
IARC	International Agency for Research on Cancer			
NTP	National Toxicology Program			
RTECS	Registry of Toxic Effects of Chemical Substances			
BCF	Bioconcentration Factor			
TLm	Median threshold limit			
log Kow or log Kos	Coofficient of Oil/Water Distribution			

REGULATORY INFORMATION:

WHMIS	Canadian Workplace Hazardous Material Information System		
DOT	U.S. Department of Transportation		
тс	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:

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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:

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