KLEEN-FLO TUMBLER IND	USTRIES LIMITED		MATERIAL SAFETY DATA SHEET				
SECTION I-MATERIAL IDEN	VITIFICATION AND	<u>USE</u>					
Material Name/Identifier:	Kleen-Start Starting Fluid		Stock No.			730	
Manufacturer's Name:	Kleen-Flo Tumbler Industries Ltd		Street Address:			75 Advance Blvd.	
City:	Brampton		Province:			Ontario	
Postal Code:	L6T 4N1		Emergency Phone #: CANUTEC:-		613-996-6666 (24HR)		
Chemical Name:	N.Ap. (Mixture)		Chemical Family:			N/Av. (Mixture)	
Chemical Formula:	N.Ap. (Mixture)		Trade Names & Synonyms:			Kleen-Start	
Material Use:	Engine Starting Fluid		Molecular Weight:			N/Av. (Mixture)	
SECTION II-HAZARDOUS IN	GREDIENTS OF MA	<u>ATERIAL</u>					
Hazardous		Approximate	LD5	LD50		LC50	
Ingredients	C.A.S.	% Concentration	Species &	Route		Species & Route	
Diethyl ether	60-29-7	40-70	1215mg/kg rat-oral 73		73000 ppm(15	73000 ppm(150 min.) rat-inhal.	
Heptane	142-82-5	30-60	4420-5840mg	14000 ppm ((4 hr) rat-inhl.	
Carbon dioxide	124-38-9	5-10	N/Ap.		N/Av.		
SECTION III-PHYSICAL DAT	I FA FOR MATERIAL	<u>.</u>					
Physical State:	Aerosol	Odour/Appearance:	ether-like odour/ colorless liquid				
Specific Gravity:	0.713	Odour Threshold(p.p.m.):		N/Av.			
Boiling Point:	35.5°C	Evaporation Rate:		>1 (Butyl-a			
Freezing Point:	N/E	Solubility in Water:	Negligible				
% Volatile(by volume):	100	Vapour Pressure, psig		80 -90			
Vapour Density(Air=1):	>1	Coefficient of Water/O	il Distribut: N/Av.				
pН	N/Ap.						
SECTION IV-FIRE AND EXPI	LOSION HAZARD O	OF MATERIAL					
Flammability Yes/No:	Yes, extremely	If yes under which o	onditions?: Excessive heat, open flame or sparks				
Auto Ignition Temperature:	N/Av.	Means of Extinction: carbon dioxide, dry chemical, foam					
Flashpoint and Method:	-45°C		Hazardous Combustion Products: Hydrocarbon fumes, smoke,				
		Carbon dioxide, carbon monoxide.					
Flame Extension:	>45 cm but <100 cm		Flashback yes.				
Upper Flammable limit (%vol)	36		Lower Flammable Limit(% by volume): 1			1	
Explosion Data:	Sensitivity to Mechanical Impact: N.Ap Sensitivity to Static Disc				ge:	N.Ap.	
SECTION V-REACTIVITY DA	<u>ATA</u>						
Chemical Stability Yes/No:		No	If NO under which conditions?			above 35.5°C	
Incompatibility to Other Substances Yes/No:		Yes	If so which ones? Strong oxidizing agents, Nitric acid			s, Nitric acid	
Reactivity and under what conditions?		N/Av.	Sulfuric acid, Amines.				
Hazardous Decomposition Prod	ucts:	Carbon monoxide & ca	arbon dioxides.	<u> </u>			
N/E: not established	N.Ap.: not applicable N/Av.: not available				N/Av.: not available		

Material Name/Identifier:	Kleen-Start Starting Fluid	Stock No.	730	PAGE 2			
SECTION VI-TOXICOLOGI	CAL PROPERTIES OF PRODUCT						
Route of Entry: ALL Routes	SKIN CONTACTSKIN ABSORPTIONEYE CONTACTINHALATIONINGESTION						
Effects of Acute Exposure:	May cause defatting and drying of skin and eye irritation. May irritate mucous membranes of respiratory tract.						
	Overexposure may cause central nervous system depression. Headache or nausea.						
Effects of Chronic Exposure:	Continuous inhalation of spray may harmful or fatal.						
LD 50 of Product:	N/Av. LC 50 of Product: N/Av.						
Irritancy of Product:	Skin & Eye Irritant	Exposure Limits of Product: N/A					
Sensitization of Product:	N/Av.	Toxicologically Synergistic	N/Av.				
CARCINOGENICITYRE	PRODUCTIVE EFFECTSTERATOGENIO	CITYMUTAGENICITY					
	Diethyl ether has caused birth defects and t	oxicity to the fetus in animal	tests.				
SECTION VII-PREVENTIVE	E MEASURES						
Personal Protective Equipmen	at to be used:						
Gloves(specify):	Solvent resistant gloves	Eye(specify):	Safety Glasses				
Respiratory(specify):	NOISH approved organic vapor mask	Clothing:	Not required				
Respiratory Protection:	If used indoors or on a continuous basis, use of NIOSH approved respirator is recommended						
Engineering Controls:	Local or mechanical ventilation required to keep exposure limit below 400 ppm (diethyl ether).						
Leak and Spill Procedure:	Absorb with inert non reactive absorbant. Use non sparking tool. Remove all ignition sources.						
Waste Disposal:	Do not puncture or incinerate, even when can is empty. Dispose as per local, provincial regulation.						
Storage Requirements:	Store in cool, well ventilayed area at room temperature. Do not expose under direct sunlight for prolonged period						
Handling Procedure &	Keep away from open flame and spark excessive heat. Do not store above 30°C for a long period of time.						
Equipment:	Keep away from reach of children. Do not inhale or ingest.						
NFPA30B/CNFC3.3.5	Level 3						
IATA (air transport)	Prohibited. (Passanger Aircraft)						
Marine (IMDG)	Limited Quantity, Aerosol, UN1950, Class 2.1						
DSL listing:	All components are listed in the inventory.						
TDG Classification:	Consumer Commodity						
WHMIS Classification:	Consumer Commodity - exempt from WHMIS labeling requirement. Complies with CCCR 2001						
SECTION VIII-FIRST AID M	MEASURES						
Eye:	Flush with plenty of water for at least 15 minutes. If irritation persists, seek medical help immediately.						
Skin:	Remove contaminated clothing. Wash with soap and water. If rash, irritation persists contact a physician.						
Inhalation:	Move patient to fresh air and restore breathing if required. If discomfort persist see a doctor.						
Ingestion:	DO NOT INDUCE VOMITING. Seek medical help immedaitely.						
SECTION IX-PREPARATIO	N DATE OF M.S.D.S.						
Additional Info/Comments:		Sources Used: Supplier's d	lata				
Phone Number:	(905) 793-4311	05) 793-4311 Prepared By: Quality Control Laboratory					
Date Prepared:	Janaury 2, 2015. Kleen-Flo Tumbler Industries Limited						
N/E+ not astablished	THIS SHEET SUPERSEDES ANY OTHER N.Ap.: not a			not aveilable			
N/E: not established	N.Ap.: not a	ррисавие	N/Av.: not available				