

**SECTION I-MATERIAL IDENTIFICATION AND USE**

Material Name/Identifier:	ACE Starting Fluid	Stock No.	735
Manufacturer's Name:	Kleen-Flo Tumbler Industries Ltd	Street Address:	75 Advance Blvd.
City:	Brampton	Province:	Ontario
Postal Code:	L6T 4N1	Emergency Phone #:	(905) 793-4311
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 INGREDIENTS OF MATERIAL**

Hazardous Ingredients	C.A.S.	Approximate % Concentration	LD50 Species & Route	LC50 Species & Route
Diethyl ether	60-29-7	40-70	1215mg/kg rat-oral	73000 ppm(150 min.) rat-inhal.
Heptane	142-82-5	30-60	24000 mg/kg	14000 ppm (4 hr) rat-inhl.
Carbon dioxide	124-38-9	5-10	N/Av.	N/Av.
Upper Cylinder Lubricant	64741-89-5	1-5	N/Av.	N/Av.

**SECTION III-PHYSICAL DATA FOR MATERIAL**

Physical State:	Liquid	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-acetate=1)
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/Oil Distribut:	N/Av.
pH	N/Av.		

**SECTION IV-FIRE AND EXPLOSION HAZARD OF MATERIAL**

Flammability Yes/No:	Yes, extremely	If yes under which conditions?: 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
Explosion Data:	Sensitivity to Mechanical Impact: N.Ap	Sensitivity to Static Discharge:	N.Ap.

**SECTION V-REACTIVITY DATA**

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?	Inorganic acid conc., Peroxides. Caustics
Reactivity and under what conditions?	N/Av.	Strong oxidizing agent	
Hazardous Decomposition Products:	Carbon monoxide & carbon dioxides.		

**SECTION VI-TOXICOLOGICAL PROPERTIES OF PRODUCT**

Route of Entry: ALL Routes	--SKIN CONTACT --SKIN ABSORPTION --EYE CONTACT --INHALATION --INGESTION		
Effects of Acute Exposure:	May cause defatting and drying of skin. May irritate mucous membranes of respiratory tract.		
	Overexposure may cause central nervous system depression. Headache or nausea.		
LD 50 of Product:	N/Av.	LC 50 of Product:	N/Av.
Irritancy of Product:	Skin & Eye Irritant	Exposure Limits of Product:	N/Av.
Sensitization of Product:	N/Av.	Toxicologically Synergistic Materials:	N/Av.
<b>--CARCINOGENICITY --REPRODUCTIVE EFFECTS --TERATOGENICITY --MUTAGENICITY</b>			
Diethyl ether has caused birth defects and toxicity to the fetus in animal tests.			

**SECTION VII-PREVENTIVE MEASURES**

Personal Protective Equipment 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 cartridge type respirator is recommended		
Leak and Spill Procedure:	Absorb with paper towel which should then be taken away to a safe place for evaporation.		
Waste Disposal:	Defective cans with residual liquid should be disposed of in an approved hazardous waste site.		
	Empty cans can disposed of at local recycling depots.		
Storage Requirements:	Storage at room temperature. Do not expose under direct sunlight for prolonged period.		
Handling Procedure & Equipment:	Keep away from open flame and spark. Do not store above 30°C for a long period of time.		
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 requiremen	Complies with CCCR 2001	

**SECTION VIII-FIRST AID MEASURES**

Eye:	Flush with large amount of water for at least 15 minutes. If irritation persists, seek medical help.
Skin:	Wash with soap and water.
Inhalation:	Remove to open air. Maintain body warmth. Seek medical help.
Ingestion:	DO NOT INDUCE VOMITING. Seek medical help.

**SECTION IX-PREPARATION DATE OF M.S.D.S.**

Additional Info/Comments:		Sources Used: Supplier's data
Phone Number:	(905) 793-4311	Prepared By: Quality Control Laboratory
Date Prepared:	January 31, 2010.	Kleen-Flo Tumbler Industries Limited

**THIS SHEET SUPERSEDES ANY OTHER M.S.D.S. PREVIOUSLY PREPARED**