

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/A (Mixture)	Chemical Family:	N/A (Mixture)
Chemical Formula:	N/A (Mixture)	Trade Names & Synonyms:	ACE Kleen-start
Material Use:	Engine Starting Fluid (Aerosol)	Molecular Weight:	N/A (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	30-60	N/A	N/A
Heptane	142-82-5	40-70	24000 mg/kg rat-oral	14000 ppm(4 hr) rat-inhl.
Carbon dioxide	124-38-9	5-10	N/A	N/A
Upper Cylinder Lubricant	64741-89-5	1-5	N/E	N/E

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/A
Boiling Point:	35.5°C	Evaporation Rate:	37.5 (Butyl acetate = 1)
Freezing Point:	N/E	Solubility in Water:	6.5%
% Volatile(by volume):	100	Vapour Pressure(mm)Hg:	537
Vapour Density(Air=1):	N/A	Coefficient of Water/Oil Distribut:	N/A
pH	N/A		

SECTION IV-FIRE AND EXPLOSION HAZARD OF MATERIAL

Flammability Yes/No	Yes, extremely	If yes under which conditions?: Excessive heat, open flames or sparks.
Auto Ignition Temperature:	N/A	Means of Extinction: Carbon dioxide, dry chemicals, foam
Flashpoint and Method:	-45 oC Tag C.C.	Hazardous Combustion Products: N/A
Flame extension	>45 cm but <100 cm,	Flashback: yes.
Upper Flammable limit (%vol)	,48	Lower Flammable Limit(% by volume): 1.85
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 50°C
Incompatibility to Other Substances Yes/No:	Yes	If so which ones? Inorganic acids, caustic peroxides
Reactivity and under what conditions?	N/A	
Hazardous Decomposition Products:	Carbon monoxide & carbon dioxides.	

N/E: not established N.Ap.: not applicable N/A: not available
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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 headache or nausea or central nervous system depression.		
Effects of Chronic Exposure:	Diethyl ether has an anesthetic effect. Continuous inhalation of spray may cause death (50 ml.)		
LD 50 of Product:	N/A	Exposure limits: TLV:	400 ppm (diethyl ether)
Irritancy of Product:	Skin & Eye Irritant		
Sensitization of Product:	N/A	Toxicologically Synergistic Materials:	N/A
--CARCINOGENICITY --REPRODUCTIVE EFFECTS --TERATOGENICITY --MUTAGENICITY			None Known
SECTION VII-PREVENTIVE MEASURES			
Personal Protective Equipment to be used:			
Gloves(specify):	Rubber	Eye(specify):	Goggles
Respiratory(specify):	Not required if used in open space.	Clothing:	not required.
Respiratory Protection:	If used indoors or on a continuous basis, use of cartridge type respirator is recommended		
Engineering Controls:	Local ventilation to keep exposure limit below 400 ppm (dimethyl ether).		
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 be disposed of at local recycling centre.		
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.		
DSL listing	All components are listed in the inventory.		
NFPA 30B/CNFC 3.3.5	Level 3		
IMDG marine	Aerosol,flammable UN Class 2.1, UN 1950, Marine Pollutant (Class 2.1 red label is required)		
IATA air transport	Prohibited.		
TDG Classification:	Consumer Commodity		
WHMIS Classification:	Consumer Commodity - exempt from WHMIS labelling requirement.		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.		
Ingestion:	DO NOT INDUCE VOMITING. Seek medical help.		
SECTION IX-PREPARATION DATE OF M.S.D.S.			
Additional Info/Comments:		Sources Used:	Handbook of Poisoning by R. Dreisbach
Phone Number:	(905) 793-4311	Prepared By:	Quality Control Laboratory
Date:	Janaury 16, 2006.	Kleen-Flo Tumbler Industries Limited	
THIS SHEET SUPERSEDES ANY OTHER M.S.D.S. PREVIOUSLY PREPARED			
N/A: not available		N/E: not established	