SECTION I-MATERIAL IDENTIFICATION AND USE

Material Name/Identifier:	Diesel Fuel Conditioner	Stock No.	991/992/993/994/995/998
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:	Blend of aliphatic alcohol & aromatic hydrocarbons.
Chemical Formula:	N/A (Mixture)	Trade Names & Synonyms:	Diesel Fuel Conditioner
Material Use:	disesel fuel additive	Molecular Weight:	N/A (Mixture)

SECTION II-HAZARDOUS INGREDIENTS OF MATERIAL

Hazardous Ingredients	C.A.S.	Approximate Concentration	LD50 Species & Route	LC50 Species & Route
2-propanol	67-63-0	60-90%	5 g/kg rat-oral	12000 ppm (8hr) rat-inh.
Dimethyl benzene	1330-20-7	10-30%	4.3 g/kg rat-oral	5000 ppm (4hr) rat-inh.
Ethyl benzene	100-41-4	1 - 5%	3.5 g/kg rat-oral	N/A

SECTION III-PHYSICAL DATA FOR MATERIAL

Physical State:	Liquid	Odour/Appearance:	Colourless, water white liquid, alcohol odour
Specific Gravity:	0.8 @ 15ºC	Odour Threshold(p.p.m.):	N/E
Boiling Point:	82-137ºC	Evaporation Rate:	N/E
Freezing Point:	N/A	Solubility in Water:	87%
% Volatile(by volume):	100%	Vapour Pressure(mm)Hg:	4.4 kPa at 20ºC
Vapour Density(Air=1):	2.2	Coefficient of Water/Oil Distribut:	3.5
pH	N.Ap.		

SECTION IV-FIRE AND EXPLOSION HAZARD OF MATERIAL

Flammability Yes/No	Yes	If yes under which conditions?	Can be ignited under normal temp. conditions.
Auto Ignition Temperature	N/E	Means of Extinction:	Alcohol Foam, carbon dioxide
Flashpoint and Method:	11ºC	Hazardous Combustion Products:	Carbon monoxide,
	Tag closed cup	carbon dioxide, hydrocarbon fumes & smoke	
Upper Flammable limit (%vol)	, 12	Lower Flammable Limit(% by volume):	2
Explosion Data:	Sensitivity to Mech. Impact: Use only non-sparking tool	Sensitivity to Static Discharge:	Use grounded equipment

SECTION V-REACTIVITY DATA

Chemical Stability Yes/No:	Yes	If NO under which conditions?	N.Ap.
Incompatibility to Other Substances Yes/No:	Yes	If so which ones?	Avoid contact with strong oxidizing
		materials, it may react with aluminum at high temp.	
Reactivity and under what conditions?	Normally stable but can become unstable at elevated temp. and pressure.		
Hazardous Decomposition Products:	Carbon monoxide, carbon dioxide produced on combustion.		

N/E: not established N.Ap.: not applicable N/A: not available

SECTION VI-TOXICOLOGICAL PROPERTIES OF PRODUCT

Route of Entry:	--SKIN CONTACT -x-SKIN ABSORPTION -x-EYE CONTACT -x-INHALATION -x-INGESTION
Effects of Acute Exposure:	May cause slight eye irritation, headaches, nausea, dizziness, drowsiness and central nervous system depression.
Effects of chronic exposure:	High exposure to dimethylbenzene to some animal studies have been reported to cause health effects on

	developing embryo/fetus. These effects were often at levels toxic to mother. The significance of these findings to		
	humans has not been determined.		
LD 50 of Product:	5gm/kg rat-oral	LC 50 of Product:	>12000 ppm rat-inh.
Irritancy of Product:	skin and eye irritant	Exposure limits of products: 2-propanol- 400 ppm,	
Sensitization of Product:	N/A	Ethyl benzene- 100 ppm, Dimethylbenzene- 100 ppm	
		Toxicologically Synergistic Materials:	N/A
--CARCINOGENICITY --REPRODUCTIVE EFFECTS --TERATOGENICITY --MUTAGENICITY		None known	

SECTION VII-PREVENTIVE MEASURES

Personal Protective Equipment to be used:

Gloves(specify):	Nitrile, viton & polyethylene	Eye(specify):	Chemical safety glasses
Respiratory(specify):	Organic canister mask	Clothing: Plastic apron Footwear: Oil resistant soles.	
Respiratory Protection:	If used indoors or on a continuous basis, use of cartridge type respirator is recommended		
Engineering Control:	If used indoors or on a continuous basis, maintain of TLV using adequate ventilation.		
Handling procedure & Equip.	Use spark resistant tools and equipment for transfers.		
Leak and Spill Procedure:	Dyke and contain land spill. Soak residue with natural absorbent.		
Waste Disposal:	Incineration or dispose at an approved waste disposal facility.		
DSL Listing	All ingredients in the product are listed in the inventory.		
Storage Requirements:	Keep in a cool place.		
TDG Classification	991/992/993 : Consumer Commodity, 994/995/996/998 as follows:		
	Flammable liquids, N.O.S.* (2-propanol/Xylene), Class 3, UN 1993, Pkg.Gr.II		
WHMIS Classification:	991/992/993 - Consumer Commodity, complies with CCCR 2001. #994/995/998 - Class B2, D2B & D2A		

SECTION VIII-FIRST AID MEASURES

Eye:	Flush with water for at least 15 minutes.
Skin:	Wash with soap and water
Inhalation:	Remove to fresh air and restore breathing if required.
Ingestion:	DO NOT INDUCE VOMITING. Guard against aspiration into lungs.

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

Additional Info/Comments:		Sources Used: NOISH Registry of Toxic Effects of Chemical Substances Shell Data	
Phone Number:	(905) 793-4311	Prepared By: Quality Control Laboratory	
Date:	January 18, 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