

SECTION I-MATERIAL IDENTIFICATION AND USE

Material Name/Identifier:	Low Sulphur Diesel Fuel Conditioner	Stock No.	963/964/965/966
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:	mixture (N.Ap.)	Chemical Family:	mixture (N.Ap.)
Chemical Formula:	mixture (N.Ap.)	Trade Names & Synonyms:	none
Material Use:	Diesel fuel additive	Molecular Weight:	mixture

SECTION II-HAZARDOUS INGREDIENTS OF MATERIAL

Hazardous		Approximate	LD50	LC50
Ingredients	C.A.S.	Concentration	Species & Route	Species & Route
2-propanol	67-63-0	60-100%	5045 mg/kg rat-oral	16000 ppm (4hr) rat-inh.
Dimethylbenzene	1330-20-7	10-30%	4300 mg/kg rabbit-dermal	5000 ppm (4hr) rat-inh.
Ethyl benzene	100-41-4	1-5%	3500mg/kg rat-oral	4000 ppm(4hr) rat-inhal

SECTION III-PHYSICAL DATA FOR MATERIAL

Physical State:	liquid	Odour/Appearance:	Alcohol odor/ transparent, yellow
Specific Gravity:	0.8	Odor Threshold(p.p.m.):	N/Av.
Boiling Point:	82-137°C	Evaporation Rate:	N/E
Freezing Point:	N/E	Solubility in Water:	Partly soluble
% Volatile(by volume):	N/E	Vapor Pressure(mm)Hg:	33.0 mmHg @ 20°C
Vapor Density(Air=1):	>1	Coefficient of Water/Oil Distribut:	N/E
pH:	N.Ap.		

SECTION IV-FIRE AND EXPLOSION HAZARD OF MATERIAL

Flammability Yes/No	Yes	If yes under which conditions? Heat, Open flame, spark
Auto Ignition Temperature:	N/Av.	Means of Extinguishing: Dry chemical, Carbon dioxide, Alcohol - resistant foam.
Flashpoint and Method:	16°C TCC	Hazardous Combustion Products: Hydrocarbon fumes, smoke, Carbon dioxide, Carbon monoxide
Upper Flammable limit (% vol)	12%	Lower Flammable Limit (% by volume): 1
Explosion Data:	Sensitivity to Mechanical Impact: Yes	Sensitivity to Static Discharge: Electrical & mechanical equipment should be explosion proof and grounded.

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? strong oxidizing compounds, Acetaldehyde, Acids,
Reactivity and under what conditions?		Chlorine. May react with aluminum equipment at temperature above 120°F
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide are produced on combustion.	

N/E: not established

N.Ap.:not applicable

N/Av.: not available

SECTION VI-TOXICOLOGICAL PROPERTIES OF PRODUCT

Route of Entry: ALL Routes	--SKIN CONTACT --SKIN ABSORPTION --EYE CONTACT --INHALATION --INGESTION		
Effects of Acute Exposure:	Moderate skin and eye irritant. Can cause conjunctivitis (eyes). Prolonged and repeated contact with skin can cause defatting and drying of the skin resulting in possible skin dermatitis.		
	High concentration inhalation may cause 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.		
Irritancy of Product:	skin & eye irritation	Exposure Limits : IPA 400 ppm STEL (ACGIH)	
		Xylene 150 ppm STEL, Ethyl benzene 100 ppm STEL	
Sensitization of Product:	N/E	Toxicologically Synergistic Materials:	N/Av.
--CARCINOGENICITY --REPRODUCTIVE EFFECTS --TERATOGENICITY --MUTAGENICITY			None known

Ethyl benzene is listed as possible carcinogenic by IARC.

SECTION VII-PREVENTIVE MEASURES

Personal Protective Equipment to be used:

Gloves(specify):	Nitrile, Viton, Chemical resistant gloves	Eye (specify):	safety glasses
Respiratory(specify):	NOISH approved Organic vapour mask	Clothing:	Not required in normal use
Respiratory Protection:	If used indoors or on a continuous basis, use of NIOSH approved respirator is recommended		
Engineering Controls:	If used indoors or on a continuous basis, maintain exposure limit by using adequate ventilation.		
	Use explosive proof pumping system for transfers.		
Leak and Spill Procedure:	Use non-reactive absorbent material and non sparking tools to contain spills.		
	Incase of large spill use explosion proof and grounded equipments. Prevent from entering waterways.		
Waste Disposal:	Dispose according to federal, state (Provincial) and local regulations		
Storage Requirements:	Store at cool, well ventilated area. Keep away from heat, open flame and ignition sources.		
Handling Procedures and Equipment:	Wear protective gloves. Use spark resistant tools and transfer equipment.		
DSL listing	Keep away from children. Do not inhale or ingest.		
	All components in this material are listed on the inventory.		
WHMIS classification:	#963 - Consumer Commodity, #964,#965 & 966 - B2, D2A & D2B.	Complies with CCCCR2001	
TDG Classification:	#963- Consumer Commodity, #964,965 & 966 - Flammable liquids, n.o.s. (2-propanol solution), UN 1993, Class 3, Packing Group II.		

SECTION VIII-FIRST AID MEASURES

Eye:	Flush with water for at least 15 minutes. Seek mediac attention immediately.
Skin:	Wash with soap and water. See doctor if irritation persist.
Inhalation	Move patient to fresh air and restore breathing if required. Call a physician if discomfort persist.
Ingestion:	DO NOT INDUCE VOMITING. Seek medical help immediately.

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

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

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