

KLEEN-FLO TUMBLER INDUSTRIES LIMITED			MATERIAL SAFETY DATA SHEET		PAGE 1	
<b>SECTION I-MATERIAL IDENTIFICATION AND USE</b>						
Material Name/Identifier:	Direct Injection Advance Fuel System Cleaner	Stock No.	103			
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/A (mixture)	Chemical Family:	N/A (mixture)			
Chemical Formula:	N/A (mixture)	Trade Names & Synonyms:	None			
Material Use:	Cleaner	Molecular Weight:	N/Av. (mixture)			
<b>SECTION II-HAZARDOUS INGREDIENTS OF MATERIAL</b>						
Hazardous Ingredients	C.A.S.	Approximate Concentration	LD50 Species & Route		LC50 Species & Route	
Petroleum Naptha	64742-47-8	10 - 30%	N/Av.			N/Av.
Stoddard solvent	8052-41-3	30-60%	> 5 g/kg rat-oral		> 5 g/m3 rat-inh.	
Hydrotreated middle distillate	64742-46-7	10 - 30 %	N/Av.		N/Av.	
Petroleum Naptha	64742-94-5	1 - 5 %	>3000mg/kg rat-oral		N/Av.	
1,2,4 Trimethylbenzene	95-63-6	1 - 5%	N/Av.		N/Av.	
Naphthalene	91-20-3	0.1 - 1.0 %	490mg/kg rat-oral		340mg/m3 rat-inhal	
Dimethylbenzene	1330-20-7	0.1 - 1.0 %	4300 mg/kg rabbit-dermal		5000 ppm (4hr) rat-inh.	
Ethyl benzene	100-41-4	0.1 - 1.0 %	3500mg/kg rat-oral		4000 ppm(4hr) rat-inhal	
Ethylheptane	111-84-2	1 - 5 %	N/Av.		3200 ppm(4hr) rat-inhal	
<b>SECTION III-PHYSICAL DATA FOR MATERIAL</b>						
Physical State:	Liquid	Odour/Appearance:	Strong solvent odour /Clear, light amber liquid			
Specific Gravity:	0.83	Odour Threshold(p.p.m.):	100 ppm TWA (Stoddard solvent)			
Boiling Point:	158-195°C	Evaporation Rate:	N/E			
Freezing Point:	N/E	Solubility in Water:	Insoluble			
% Volatile(by volume):	N/E	Vapour Pressure(mm)Hg:	N/E			
Vapour Density(Air=1):	N/E	Coefficient of Water/Oil Distribut	N/E			
pH	N/Av.					
<b>SECTION IV-FIRE AND EXPLOSION HAZARD OF MATERIAL</b>						
Flammability Yes/No	Yes, combustible liquid	If yes under which conditions?: upon ignition above 40°C				
Auto Ignition Temperature:	260°C	Means of Extinguishing: Carbon dioxide, Foam, Water Fog, Dry Chemical				
Flashpoint and Method:	39°C Tag CC	Hazardous Combustion Products:Carbon dioxide, carbon monoxide, aldehyde, ammonia, propylamineglycol, plyalkylglycol, aliphatic alcohol may be released.				
Upper Flammable limit (% vol)	5.6	Lower Flammable Limit (% vol): 0.8				
Explosion Data:	Sensitivity to mechanical impact: N/E	Sensitivity to Static Discharge: N/E				
<b>SECTION V-REACTIVITY DATA</b>						
Chemical Stability Yes/No:	Yes	If NO under which conditions?: N/E				
Incompatibility to Other Substances Yes/No:	Yes	If so which ones? Strong oxidizing materials				
Reactivity and under what conditions?	Avoid spark, open flames and other sources of ignition					
Hazardous Decomposition Products:	Carbon monoxide, carbon dioxide, aldehyde, ammonia, propylamineglycol and aliphatic alcohol may be released.					
N/E: not established N/Av.: Not applicable N/Av.: not available						

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<b>SECTION VI-TOXICOLOGICAL PROPERTIES OF PRODUCT</b>				
Route of Entry: All routes	--SKIN CONTACT --SKIN ABSORPTION --EYE CONTACT --INHALATION --INGESTION			
Effects of Acute Exposure:	May cause eye and skin irritation, if aspirated may cause lungs damage.			
Effects of chronic exposure:	Prolonged exposure to high vapor concentration can cause headaches, dizziness, nausea & other central nervous system effects. Small amount of liquid aspirated in to lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema. Prolong and repeated contact with skin cause defatting and drying of the skin resulting in skin irritation and dermatitis.			
LD 50 of Product:	N/E	LC 50 of Product:	N/E	
Irritancy of Product:	eye and skin irritant	Exposure Limits of Product:	N/E	
Sensitization of Product:	N/E	Toxicologically Synergistic Materials:	N/E	
--CARCINOGENICITY --REPRODUCTIVE EFFECTS --TERATOGENICITY --MUTAGENICITY			none known	
<b>SECTION VII-PREVENTIVE MEASURES</b>				
Personal Protective Equipment to be used:				
Gloves(specify):	Neoprene, Nitrile, Chemical resistant glo	Eye (specify):	safety goggles	
Respiratory(specify):	Organic vapour mask	Clothing:	Not required	
Respiratory Protection:	If used indoors or on a continuous basis, use of NIOSH approved cartridge type respirator is recommended			
Engineering Controls:	Local exhaust ventilation			
Leak and Spill Procedure:	Use inert absorbent, eliminate all sources of ignition. ventilated area. Wear respiratory protection.			
Waste Disposal:	Local govt. approved method in your area			
Storage Requirements:	Store in a cool, well ventilated area. Avoid sources of ignition and excessive heat.			
Handling Procedures and Equipment:	Keep container closed when not in use. Kepp away from children. Do not inhale or ingest.			
TDG Classification:	Exempted under Part 1, section 1.33 for combustible liquid.			
WHMIS Classification:	B3 D2B			
<b>SECTION VIII-FIRST AID MEASURES</b>				
Eye:	Flush eyes with water for at least 15 minutes. If irritation persists, seek medical help immediately.			
Skin:	Wash contaminated skin with mild soap and water. If irritation persist consult doctor.			
Inhalation:	Remove patient to fresh air and restore breathing if required. If discomfort persist see doctor.			
Ingestion:	DO NOT INDUCE VOMITNG. Get medical help immediately.			
<b>SECTION IX-PREPARATION DATE OF M.S.D.S.</b>				
Additional Info/Comments:		Sources Used: Supplier's data		
Phone Number:	(905) 793-4311	Prepared By: Quality Control Laboratory		
Date Prepared:	May 10th, 2016.	Kleen-Flo Tumbler Industries Limited		
<b>THIS SHEET SUPERSEDES ANY OTHER M.S.D.S. PREVIOUSLY PREPARED</b>				
N/E: not established		N/Av.: Not applicable		N/Av.: not available