KLEEN-FLO TUMBLER II	NDUSTRIES LIMITE	CD .	MATERIAL SAFETY DATA SHEET PAGE				
SECTION I-MATERIAL IE	DENTIFICATION AN	<u>D USE</u>					
Material Name/Identifier:	Eco-Care Engine D	Stock No.	Stock No.		022 / 023		
Manufacturer's Name:	Kleen-Flo Tumbler Industries Ltd		Street Address:			75 Advance Blvd.	
City:	Brampton		Province:			Ontario	
Postal Code:	L6T 4N1			Emergency Phone #: CANU		613-996-6666 (24HR)	
Chemical Name:	N.Ap.(mixture)		Chemical Family:		- W	N.Ap.(mixture)	
Chemical Formula:	N.Ap. (Mixture)		Trade Names & Synonyms:		N/A		
Material Use:	Cleaner, Degreaser			Molecular Weight:		N.Ap.	
SECTION II-HAZARDOUS	INGREDIENTS OF	MATERIAL .					
Hazardous		Approximate	LD:	LD50		LC50	
Ingredients	C.A.S.	Concentration	Species &	Route		Species & Route	
D-limonene Alcohol ethoxylate Diethylene glycol monobutyl	5989-27-5 68439-46-3 112-34-5	10 -30 % 1-5% 1-5%	> 2 g/kg rat-o >2 g/kg rat-o 6.56 g/kg rat	ral		N/E N/E N/E	
•							
SECTION III-PHYSICAL I	_						
Physical State:	Liquid	Odour/Appearance:		Ü	s.clear light yel	llow liquid	
Physical State: Specific Gravity:	Liquid	Odour/Appearance: Odour Threshold(p.p	.m.):	N/E		llow liquid	
Physical State: Specific Gravity: Boiling Point:	Liquid 1.01 100°C (Approx.)	Odour/Appearance: Odour Threshold(p.p Evaporation Rate:	.m.):	N/E 1 (Water=1)		llow liquid	
Physical State: Specific Gravity: Boiling Point: Freezing Point:	Liquid 1.01 100°C (Approx.) 0 °C	Odour/Appearance: Odour Threshold(p.p Evaporation Rate: Solubility in Water:		N/E 1 (Water=1) Emulsifies		llow liquid	
Physical State: Specific Gravity: Boiling Point: Freezing Point: % wt. Volatile:	Liquid 1.01 100°C (Approx.) 0 °C N/E	Odour/Appearance: Odour Threshold(p.p Evaporation Rate: Solubility in Water: Vapour Pressure(mm)Hg:	N/E 1 (Water=1) Emulsifies N/E		llow liquid	
Physical State: Specific Gravity: Boiling Point: Freezing Point: % wt. Volatile: Vapour Density(Air=1):	Liquid 1.01 100°C (Approx.) 0 °C N/E N/E	Odour/Appearance: Odour Threshold(p.p Evaporation Rate: Solubility in Water:)Hg:	N/E 1 (Water=1) Emulsifies		llow liquid	
Physical State: Specific Gravity: Boiling Point: Freezing Point: wt. Volatile: Vapour Density(Air=1):	Liquid 1.01 100°C (Approx.) 0 °C N/E N/E 11-12.3	Odour/Appearance: Odour Threshold(p.p Evaporation Rate: Solubility in Water: Vapour Pressure(mm Coefficient of Water/)Hg:	N/E 1 (Water=1) Emulsifies N/E		llow liquid	
Physical State: Specific Gravity: Boiling Point: Freezing Point: We wt. Volatile: Vapour Density(Air=1): OH SECTION IV-FIRE AND E	Liquid 1.01 100°C (Approx.) 0 °C N/E N/E 11-12.3	Odour/Appearance: Odour Threshold(p.p Evaporation Rate: Solubility in Water: Vapour Pressure(mm Coefficient of Water/o)Hg: Oil Distribut:	N/E 1 (Water=1) Emulsifies N/E N/E)	llow liquid me, heat, spark. May for	
Physical State: Specific Gravity: Boiling Point: Freezing Point: wt. Volatile: Vapour Density(Air=1): DH SECTION IV-FIRE AND E	Liquid 1.01 100°C (Approx.) 0 °C N/E N/E 11-12.3 XPLOSION HAZARD	Odour/Appearance: Odour Threshold(p.p Evaporation Rate: Solubility in Water: Vapour Pressure(mm Coefficient of Water/o)Hg: Oil Distribut: If yes under	N/E 1 (Water=1) Emulsifies N/E N/E which condit)	me, heat, spark. May for	
Physical State: Specific Gravity: Boiling Point: Freezing Point: % wt. Volatile: Vapour Density(Air=1): DH SECTION IV-FIRE AND E	Liquid 1.01 100°C (Approx.) 0 °C N/E N/E 11-12.3 XPLOSION HAZARD	Odour/Appearance: Odour Threshold(p.p Evaporation Rate: Solubility in Water: Vapour Pressure(mm Coefficient of Water/o	Oil Distribut: If yes under explosive air-	N/E 1 (Water=1) Emulsifies N/E N/E which conditions to the conditi	ions:Open flar	me, heat, spark. May for	
Physical State: Specific Gravity: Boiling Point: Freezing Point: We with Volatile: Wapour Density(Air=1): OH SECTION IV-FIRE AND E	Liquid 1.01 100°C (Approx.) 0 °C N/E N/E 11-12.3 XPLOSION HAZARD Yes, Combustible li	Odour/Appearance: Odour Threshold(p.p Evaporation Rate: Solubility in Water: Vapour Pressure(mm Coefficient of Water/o	Oil Distribut: If yes under explosive air- Means of Ex	N/E 1 (Water=1) Emulsifies N/E N/E which condit vapour mixtu tinction: carb	ions:Open flar ire at elevated oon dioxide, di	me, heat, spark. May for temperature. ry powder, foam type des of carbon	
Physical State: Specific Gravity: Boiling Point: Freezing Point: % wt. Volatile: Vapour Density(Air=1): DH SECTION IV-FIRE AND E Flammability Yes/No Auto Ignition Temperature: Flashpoint and Method:	Liquid 1.01 100°C (Approx.) 0 °C N/E N/E 11-12.3 XPLOSION HAZARD Yes, Combustible li N/E 52°C TCC	Odour/Appearance: Odour Threshold(p.p Evaporation Rate: Solubility in Water: Vapour Pressure(mm Coefficient of Water/o	Oil Distribut: If yes under explosive air- Means of Ex Hazardous C	N/E 1 (Water=1) Emulsifies N/E N/E N/E which conditivapour mixtuitinction: carb	ions:Open flar are at elevated oon dioxide, di Products: Oxic	me, heat, spark. May for temperature. ry powder, foam type des of carbon	
Physical State: Specific Gravity: Boiling Point: Freezing Point: W wt. Volatile: Vapour Density(Air=1): OH SECTION IV-FIRE AND E Flammability Yes/No Auto Ignition Temperature: Flashpoint and Method: Upper Flammable limit (% volume in the second in the se	Liquid 1.01 100°C (Approx.) 0 °C N/E N/E 11-12.3 XPLOSION HAZARD Yes, Combustible li N/E 52°C TCC	Odour/Appearance: Odour Threshold(p.p. Evaporation Rate: Solubility in Water: Vapour Pressure(mm Coefficient of Water/	Oil Distribut: If yes under explosive air- Means of Ex Hazardous C	N/E 1 (Water=1) Emulsifies N/E N/E which condit vapour mixtu tinction: carb combustion P and product mable Limit(ions:Open flar are at elevated bon dioxide, di roducts: Oxic as of incomplet by volume	me, heat, spark. May form temperature. ry powder, foam type des of carbon te combustion.	
Physical State: Specific Gravity: Boiling Point: Freezing Point: % wt. Volatile: Vapour Density(Air=1): DH SECTION IV-FIRE AND E Flammability Yes/No Auto Ignition Temperature: Flashpoint and Method: Upper Flammable limit (% vector)	Liquid 1.01 100°C (Approx.) 0 °C N/E N/E 11-12.3 XPLOSION HAZARD Yes, Combustible li N/E 52°C TCC OD N/Av. Sensitivity to Mech	Odour/Appearance: Odour Threshold(p.p. Evaporation Rate: Solubility in Water: Vapour Pressure(mm Coefficient of Water/	Oil Distribut: If yes under explosive air- Means of Ex Hazardous C	N/E 1 (Water=1) Emulsifies N/E N/E which condit vapour mixtu tinction: carb combustion P and product mable Limit(ions:Open flar are at elevated bon dioxide, di roducts: Oxic as of incomplet by volume	me, heat, spark. May for temperature. ry powder, foam type des of carbon	
Physical State: Specific Gravity: Boiling Point: Freezing Point: % wt. Volatile: Vapour Density(Air=1): bH SECTION IV-FIRE AND E Flammability Yes/No Auto Ignition Temperature: Flashpoint and Method: Upper Flammable limit (% vexplosion Data:	Liquid 1.01 100°C (Approx.) 0 °C N/E N/E 11-12.3 XPLOSION HAZARD Yes, Combustible li N/E 52°C TCC OD N/Av. Sensitivity to Mech	Odour/Appearance: Odour Threshold(p.p. Evaporation Rate: Solubility in Water: Vapour Pressure(mm Coefficient of Water/	Oil Distribut: If yes under explosive air- Means of Ex Hazardous C Lower Flamm Sensitivity to	N/E 1 (Water=1) Emulsifies N/E N/E which condit vapour mixtu tinction: carb combustion P and product mable Limit(ions:Open flar ire at elevated oon dioxide, di Products: Oxic is of incomplet % by volume) arge:	me, heat, spark. May form temperature. ry powder, foam type des of carbon te combustion.	
Physical State: Specific Gravity: Boiling Point: Freezing Point: We wt. Volatile: Vapour Density(Air=1): OH SECTION IV-FIRE AND E Flammability Yes/No Auto Ignition Temperature: Flashpoint and Method: Upper Flammable limit (% volations) Explosion Data: SECTION V-REACTIVITY Chemical Stability Yes/No:	Liquid 1.01 100°C (Approx.) 0 °C N/E N/E 11-12.3 XPLOSION HAZARD Yes, Combustible li N/E 52°C TCC OD N/Av. Sensitivity to Mech	Odour/Appearance: Odour Threshold(p.p. Evaporation Rate: Solubility in Water: Vapour Pressure(mm Coefficient of Water/	Oil Distribut: If yes under explosive air- Means of Ex Hazardous C Lower Flamm Sensitivity to	N/E 1 (Water=1) Emulsifies N/E N/E N/E which conditivapour mixtuitinction: carbinetic c	ions:Open flar ire at elevated oon dioxide, di Products: Oxic is of incomplet % by volume) arge:	me, heat, spark. May for temperature. ry powder, foam type des of carbon te combustion. : N/Av.	
Physical State: Specific Gravity: Boiling Point: Freezing Point: % wt. Volatile:	Liquid 1.01 100°C (Approx.) 0 °C N/E N/E 11-12.3 XPLOSION HAZARD Yes, Combustible li N/E 52°C TCC OI) N/Av. Sensitivity to Mech	Odour/Appearance: Odour Threshold(p.p Evaporation Rate: Solubility in Water: Vapour Pressure(mm Coefficient of Water/ OOF MATERIAL quid anical Impact: No	If yes under explosive air-Means of Ex Hazardous C Lower Flam Sensitivity to	N/E 1 (Water=1) Emulsifies N/E N/E N/E which conditivapour mixtuitinction: carbinetic c	ions:Open flar ire at elevated oon dioxide, di Products: Oxic is of incomplet % by volume) arge:	me, heat, spark. May form temperature. ry powder, foam type des of carbon te combustion. : N/Av. N/E	

N.Ap.: not applicable

N/Av.: not available

N/E: not established

Material Name/Identifier:	Eco-Care Engine Degreaser	Stock No. 022 / 023	PAGE 2				
SECTION VI-TOXICOLOG	ICAL PROPERTIES OF PRODUCT						
Route of Entry: ALL routes	SKIN CONTACTSKIN ABSORPTION	NEYE CONTACTINHALATION	-INGESTION				
Effects of Acute Exposure:	Over exposure to vapour may irritate respiratory passages and/or cause dizziness, nausea or headaches.						
	May cause eye and skin irritation. Ingestion	n may cause gastrointestinal irritation and	d diarrhea.				
Effects of Chronic Exposure:	None known						
LD 50 of Product:	N/E	LC 50 of Product:	N/E				
Irritancy of Product:	Moderate skin and eye irritant	Exposure Limits of Product:	N/E				
Sensitization of Product:	N/E	Toxicologically Synergistic Materials:	N/E				
CARCINOGENICITYR	EPRODUCTIVE EFFECTSTERATOGEN	ICITYMUTAGENICITY	None known				
SECTION VII-PREVENTIV Personal Protective Equipmer	t to be used:						
Gloves(specify):	Solvent proof gloves		of eye goggles				
Respiratory(specify):	Maintain adequate ventilation	Clothing: Not require					
Respiratory Protection:	If used indoors or on a continuous basis, us	e of cartridge respirator for organic vapo	our is recommended				
Engineering Controls:	Positive exhaust ventilation required for encl	losed area					
Leak and Spill Procedure:	Use absorbent material and place in sealed c	ontainer, rinse area with plenty of water.					
Waste Disposal:	According to your local and /or provincial re	gulation					
Storage Requirements:	Keep material at anbient temperature. Keep away form source of heat, spark and ignition.						
Handling Procedures and	No special procedure or equipment required	i.					
Equipment:							
DSL listing	All components are listed						
TDG Classification:	Not regulated.						
WHMIS Classification:	B3, D2B						
SECTION VIII-FIRST AID	MEASURES						
Eye:	Wash with water for at least 15 minutes. See	ek medical help if irritation persists.					
Skin:	Wash with soap and water. Seek medical help if irritation persists						
Inhalation:	Remove to fresh air. Seek medical help.						
Ingestion:	DO NOT INDUCE VOMITING. Give a glass of milk or water. Seek medical help immediately						
SECTION IX-PREPARATIO	ON DATE OF M.S.D.S.						
Additional Info/Comments:		Sources Used:					
Phone Number:	(905) 793-4311	Prepared By: Quality Control Laborat	tory				
Date Prepared:	January 2, 2015.	Kleen-Flo Tumbler In	-				
	THIS SHEET SUPERSEDES ANY OTHER	R M.S.D.S. PREVIOUSLY PREPAREI)				
N/Av.: not availabl	e N/Ap. : not applicable	N/E: not es	tablished				