

SECTION I-MATERIAL IDENTIFICATION AND USE

Material Name/Identifier:	ACE Biodegradable Engine Degreaser	Stock No.	644
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. Ap (mixture)	Chemical Family:	N.Ap (mixture)
Chemical Formula:	N. Ap (mixture)	Trade Names & Synonyms:	ACE
Material Use:	industrial cleaner	Molecular Weight:	N.Ap.(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	1-5%	5045 mg/kg rat-oral	16970 ppm (4hr) rat-inh.
2-butoxyethanol	111-76-2	3-7%	1746 mg/kg rat-oral	450 ppm (4hr) rat-inh.
Ethoxylated C12-15 alcohols	68131-39-5	3- 7 %	>3200 mg/kg rat-oral	N/Av.
Caustic potash (45%)	1310-58-3	1-5%	273 mg/kg rat-oral	N/Av.
Sodium metasilicate	6834-92-0	1-5%	0.8 g/kg rat-oral	N/Av.
Sodium Tripolyphosphate	7758-29-4	1-5%	3100 mg/kg rat-oral	N/Av.

SECTION III-PHYSICAL DATA FOR MATERIAL

Physical State:	liquid	Odour/Appearance:	light lemon odour/ fluorescent green color
Specific Gravity:	1.04	Odour Threshold(p.p.m.):	N/E
Boiling Point:	N/E	Evaporation Rate:	N/E
Freezing Point:	0°C	Solubility in Water:	Soluble
% Volatile(by volume):	N/E	Vapour Pressure(mm)Hg:	N/Av.
Vapour Density(Air=1):	N/Av	Coefficient of Water/Oil Distribut:	N/E
pH	12 - 13		

SECTION IV-FIRE AND EXPLOSION HAZARD OF MATERIAL

Flammability Yes/No	No	If yes under which conditions:	N.Ap.
Auto Ignition Temperature:	N/Av.	Means of Extinction:	carbon dioxide foam, water spray
Flashpoint and Method:	None	Hazardous Combustion Products:	None known
Upper Flammable limit (%vol)	N/Av.	Lower Flammable Limit(% by volume):	N/Av.
Explosion Data:	Sensitivity to Mechanical Impact: N.Ap.	Sensitivity to Static Discharge:	N.Ap.

SECTION V-REACTIVITY DATA

Chemical Stability Yes/No:	Yes	If NO under which conditions?	
Incompatibility to Other Substances Yes/No:	Yes	If so which ones?	strong oxidizing agents, strong acids
Reactivity and under what conditions?	Heat, open flame, ignition sources		
Hazardous Decomposition Products:	Carbon and nitrogen oxides		
N/E: not established	N.Ap.: not applicable	N/Av.: not available	

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<u>SECTION VI-TOXICOLOGICAL PROPERTIES OF PRODUCT</u>									
Route of Entry:		-x-SKIN CONTACT --SKIN ABSORPTION -x-EYE CONTACT -x-INHALATION --INGESTION							
Effects of Acute Exposure:		WARNING: Causes severe eye and moderate skin irritation.							
		Breathing vapour or mist may cause coughing, headache, nausea, intoxication, nasal and respiratory track irritation, pneumontis and tissue damage.							
Effects of Chronic Exposure:		No chronic effects known.							
LD 50 of Product:		N/Av.		LC 50 of Product:				N/Av.	
Irritancy of Product:		Severe eye irritation		Exposure Limits of Product:				N/Av.	
Sensitization of Product:		N/E		Toxicologically Synergistic Materials:				N/Av.	
--CARCINOGENICITY --REPRODUCTIVE EFFECTS --TERATOGENICITY --MUTAGENICITY								None known	
Ecological Information:		Readily Biodegradable.							
<u>SECTION VII-PREVENTIVE MEASURES</u>									
Personal Protective Equipment to be used:									
Gloves(specify):		Rubber gloves			Eye(specify):		Safety glasses		
Respiratory(specify):		NIOSH approved chemical resistant mask			Clothing:		Apron		
Respiratory Protection:		If used indoors or on a continuous basis, use of cartridge type NIOSH approved respirator is recommended							
		Build up of mists/vapors in the working atmosphere must be prevented. Do not breath mist or vapour.							
Engineering Controls:		General ventilation and local exhaust recommended.							
Leak and Spill Procedure:		Neutralize spills with citric acid and soak up using non-reactive absorbent such as clay and sand or any other suitable material. Flush area with water.							
Waste Disposal:		In accordance with federal and local regulation.							
Storage Requirements:		Store in a cool and dry area. Do not freeze							
Handling Procedures and Equipment:		Avoid inhalation, eye and skin contact. Do not swallow. Keep containers tightly closed when not in use. Keep out of reach of children.							
TDG Classification:		Not regulated.							
WHMIS Classification:		D2B							
DSL		All ingredients in this product are listed on the Domestic substances list.							
Hazard Rating:		Health 1, Flammability 0, Reactivity 0							
<u>SECTION VIII-FIRST AID MEASURES</u>									
Eye:		Wash with plenty of water for at least 15 minutes. Seek medical attention if irritation persists.							
Skin:		Remove contaminated clothing and flush skin with plenty of water. Call a physician if irritation persists							
Inhalation:		Remove person from area of exposure. If breathing is difficult or irritation persists, call a physician.							
Ingestion:		DO NOT INDUCE VOMITING. Give a of water or milk and call a physician immediately.							
		Do not give anything by mouth to a unconscious or convulsing person.							
<u>SECTION IX-PREPARATION DATE OF M.S.D.S.</u>									
Additional Info/Comments:					Sources Used: Supplier's data				
Phone Number:		(905) 793-4311			Prepared By: Quality Control Laboratory				
Date Prepared:		January 2, 2015			Kleen-Flo Tumbler Industries Limited				
THIS SHEET SUPERSEDES ANY OTHER M.S.D.S. PREVIOUSLY PREPARED									
N/E: not established			N.Ap.: not applicable				N/Av.: not available		