

**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/ flourescent 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	

**SECTION VI-TOXICOLOGICAL PROPERTIES OF PRODUCT**

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.		

**SECTION VII-PREVENTIVE MEASURES**

**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		

**SECTION VIII-FIRST AID MEASURES**

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.

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

Additional Info/Comments:		Sources Used: Supplier's data
Phone Number:	(905) 793-4311	Prepared By: Quality Control Laboratory
Date Prepared:	January 2, 2012	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
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