

SECTION I-MATERIAL IDENTIFICATION AND USE

Material Name/Identifier:	TKO Friction Shield Engine Treatment	Stock No.	777
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. Ap (Mixture)	Chemical Family:	N.Ap. (Mixture)
Chemical Formula:	N. Ap (Mixture)	Trade Names & Synonyms:	TKO (Friction Shield)
Material Use:	Motor oil additive	Molecular Weight:	N. Ap (Mixture)

SECTION II-HAZARDOUS INGREDIENTS OF MATERIAL

Hazardous Ingredients	C.A.S.	Approximate Concentration	LD50 Species & Route	LC50 Species & Route
Petroleum mineral oil	64742-58-1	40- 70 %	>2000 mg/kg rat-oral	N/Av.
Heavy paraffinic oil	64742-54-7	10 - 30%	>5000mg/kg rat-oral	5.2mg/L 4 hr Rat. Inhal.
Calcium sulfonate	61789-86-4	1 - 5 %	N/Av.	N/Av.
*This material is not known to contain any chemicals listed as a carcinogen by OSHA, IRAC or the US National Toxicology Program at a concentration greater than 0.1%.				

SECTION III-PHYSICAL DATA FOR MATERIAL

Physical State:	Viscous liquid	Odour/Appearance:	mild odour/dark amber, oily liquid
Specific Gravity:	0.85 @ 15.6°C	Odour Threshold(p.p.m.):	N/E
Boiling Point:	N/Av.	Evaporation Rate:	Negligible
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 Distribu	N/E
pH	N.Ap.		

SECTION IV-FIRE AND EXPLOSION HAZARD OF MATERIAL

Flammability Yes/No	No	If yes under which conditions?:	N.Ap.
Auto Ignition Temperature:	N/E	Means of Extinction:	Foam, carbon dioxide, dry chemicals
Flashpoint and Method:	165°C COC	Hazardous Combustion Products:	Carbon dioxide, carbon monoxide Oxide of sulfur, aldehyde. Ketones,unidentified organic vapours.
Upper Flammable limit (%vol)	N/E	Lower Flammable Limit(% by volume):	N/E
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?:	N.Ap.
Incompatibility to Other Substances Yes/No:	Yes	If so which ones?	Strong oxidizing agents
Reactivity and under what conditions?	Open flame, spark and high heat		
Hazardous Decomposition Products:	Oxides of carbon, sulfur, phosphorous and Zinc. Carbon dioxide Carbon monoxide where combustion incomplete. Hydrocarbon fumes, smoke		
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:	May cause eye & skin irritation, dizziness, headache, nausea, vomiting, cough & pulmonary irritation.		
	Ingestion may cause irritation of the gastrointestinal tract		
Effects of Chronic Exposure:	Prolong repeated inhalation of oil mist may cause oil pneumonia, lung tissue inflammation and fibrous tissue formation.		
	Prolong repeated eye contact may cause inflammation of the membrane lining the eyelids, covering the eyeball.		
	prolong repeated skin contact may cause drying, cracking, redness, itching and dermatitis.		
LD 50 of Product:	N/E	LC 50 of Product:	N/E
Irritancy of Product:	Eye, 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	

SECTION VII-PREVENTIVE MEASURES

Personal Protective Equipment to be used:			
Gloves(specify):	Nitrile, PVA or Chemical resistant glove	Eye(specify):	Safety Glasses
Respiratory(specify):	Not required in normal use	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 or mechanical ventilation		
Leak and Spill Procedure:	Dike and absorb spill with absorbent material. Pick up oily liquid for recycling.		
	Keep spills out of waterways. Wash area with detergent and water.		
Waste Disposal:	Handle as used motor oil. Dispose of at local hazardous waste centre. Or follow local government regulation.		
Storage Requirements:	Store at room temperature, keep container closed when not in use		
Handling Procedures and Equipment:	Handle with care. Keep away from children. Do not inhale or ingest.		
TDG Classification:	Non regulated		
WHMIS Classification:	Non controlled		

SECTION VIII-FIRST AID MEASURES

Eye:	Flush with water for at least 15 minutes. Seek medical help immediately if discomfort persists.
Skin:	Remove contaminated clothing. Wash immediately with soap & water. See doctor if irritation persist.
Inhalation:	Remove to fresh air. Restore breathing if required. See doctor if discomfort persist.
Ingestion:	DO NOT INDUCE VOMITING. Get 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	Prepared By: Quality Control Laboratory
Date Prepared:	January 16, 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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