

SECTION I-MATERIAL IDENTIFICATION AND USE

Material Name/Identifier:	Safe -T-Brake	Stock No.	509/510/511/513
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:	Alcohol
Chemical Formula:	N/Ap (mixture)	Trade Names & Synonyms:	Safe-T-Brake
Material Use:	Air Brake Anti-Freeze	Molecular Weight:	N/Ap.

SECTION II-HAZARDOUS INGREDIENTS OF MATERIAL

Hazardous Ingredients	C.A.S.	Approximate Conc. %wt.	LD50 Species & Route	LC50 Species & Route
Methanol	67-56-1	60 - 100%	5628 mg/kg rat-oral	64000 ppm (4hrs) rat-inh.

SECTION III-PHYSICAL DATA FOR MATERIAL

Physical State:	Liquid	Odour/Appearance:	Colourless with alcoholic odour.
Specific Gravity:	0.792	Odour Threshold(p.p.m.):	N/Av.
Boiling Point:	64.5°C	Evaporation Rate:	4.1
Freezing Point:	-97.8°C	Solubility in Water:	miscible
% Volatile(by volume):	100	Vapour Pressure(mm)Hg:	96 mm Hg @ 20°C
Vapour Density(Air=1):	1.105 @ 15°C	Coefficient of Water/Oil Distribut:	readily soluble in water, separates from oil.
pH	7 - 8		

SECTION IV-FIRE AND EXPLOSION HAZARD OF MATERIAL

Flammability Yes/No	Yes	If yes under which conditions:	Can be ignited under almost all normal temp. conditions.
Auto Ignition Temperature:	385°C	Means of Extinguishing:	Carbondioxide, Dry chemical media for small fire.
Flashpoint and Method:	11.5°C TCC	Water spray in a fog form, Alcohol resistant foam for large fire.	
		Hazardous Combustion Products:	Fumes, smokes, oxides of carbon & formalddehyde.
Upper Flammable limit (%vol)	36.5	Lower Flammable Limit(% by volume):	6
Explosion Data:	Sensitivity of mechanical Impact: Yes	Sensitivity to Static Discharge: Yes	Use grounded quipment.

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 acids, strong bases & strong oxidizers. May react with metallic aluminum or magnisium and generate hydrogen gas.
Reactivity and under what conditions?	Yes, Heat, spark, open flame and in contact with incompatible substance		
Hazardous Decomposition Products:	Carbon monoxide, carbon dioxide, formaldehyde on burning.		

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:	Cause skin & eye irritation, ingestion may cause severe headache, dizziness, nausea, vomiting, and depression of the central nervous system. May cause visual disturbance or blindness.			
Effects of Chronic Exposure:	May cause visual impairment and progress to contraction of visual fields and sometimes complete blindness. The fatal internal dosage is 60 - 250 ml.			
Irritancy of Product:	Skin and eye irritant	Exposure Limits of Product:	200 ppm skin (ACGIH)	
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):	Butyl Rubber, Nitrile, Chemical resistant gloves	Eye(specify):	Safety Goggles	
Respiratory(specify):	Not required in normal use	Clothing:	Not required in normal use	
Respiratory Protection:	If used indoors or on a continuous basis, use of NIOSH approved respirator is recommended			
Engineering Controls:	Local or mechanical ventilation required to maintain exposure limit below TLV.			
Leak and Spill Procedure:	Remove all sources of ignition. Use non sparking, explosion proof equipment. Use non reactive absorbent, Contain liquid, dispose waste material at an approved hazardous waste disposal facility in accordance with local, provincial and federal regulation.			
Waste Disposal:	Dispose off at an approved waste disposal facility.			
Storage Requirements:	Keep away from open flames or sparks. Store in a cool place where temperature below 40 °C.			
Handling Procedures and Equipment:	Keep away from children. Do not inhale or ingest. Use of spark resistant tools and equipment is recommended.			
TDG Classification:	Flammable Liquids, Toxic, Organic, n.o.s.(methanol mixture) Class 3 (6.1)UN 1992, Pkg.Gr.II #510, #511, #513			
	#509 Limited Quantity			
WHMIS Classification:	#509 Consumer commodity	#510, #511 & 513: B2, D1B, D2A, D2B		

SECTION VIII-FIRST AID MEASURES

Eye:	Flush with fresh water for at least 15 minutes. Seek immediate medical attention immediately.
Skin:	Wash with soap and water see doctor if irritation persist.
Inhalation:	Move patient to fresh air and restore breathing if required. Call a physician immediately if discomfort persist.
Ingestion:	DO NOT INDUCE VOMITING. If person is conscious then give a glass of water. Do not give anything by mouth to unconscious person. Vomiting should be induce under the direction of Doctor only. Call doctor 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 2, 2015	Kleen-Flo Tumbler Industries Limited

N/Av.: not available

N/Ap.: not applicable

N/E: not established