

KLEEN-FLO TUMBLER INDUSTRIES LIMITED

MATERIAL SAFETY DATA SHEET

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SECTION I-MATERIAL IDENTIFICATION AND USE

Material Name/Identifier:	Original Gas Line Anti-Freeze	Stock No.	426
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:	Methanol	Chemical Family:	Alcohol
Chemical Formula:	CH3OH	Trade Names & Synonyms:	None
Material Use:	Gas line Anti-Freeze	Molecular Weight:	32.04

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 rat/4hrs , inh.

SECTION III-PHYSICAL DATA FOR MATERIAL

Physical State:	Liquid	Odour/Appearance:	Alcohol odour, clear, colourless liquid
Specific Gravity:	0.792@ 20/20°C	Odour Threshold(p.p.m.):	2000 ppm
Boiling Point:	64.5°C	Evaporation Rate:	2.1
Freezing Point:	-97.8°C	Solubility in Water:	Soluble
% Volatile(by volume):	100%	Vapour Pressure(mm)Hg:	96 at 15°C
Vapour Density(Air=1):	1.105 @ 15°C	Coefficient of Water/Oil Distrib	readily soluble in water, separates from oil.
pH	N.Ap.		

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 Extinction:	Alcohol foam, polymer foam for large fires.
Flashpoint and Method:	11.5°C TCC		Carbon dioxide or dry chemical for small fires.
			Hazardous Combustion Products: Fumes, smoke, carbon monoxide. Formaldehyde.
Upper Flammable limit(%vol),	36.5	Lower Flammable Limit(% by volume):	6
Explosion Data:	Sensitivity ot mechanical impact: Yes	Sensitivity to Static Discharge: Yes, use grounded equipment	

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 and strong oxidizers.
Reactivity and under what conditions?	none known	Reactive metals like Alluminum, Magnesium, Sodium.	
Hazardous Decomposition Products:	Carbon monoxide, carbon dioxide, formaldehyde on burning.		

N/E: not established

N.Ap.: not applicable

N/Av.: not available

Material Name/Identifier: Original Gas Line Anti-Freeze		Stock No. 426		PAGE 2
SECTION VI-TOXICOLOGICAL PROPERTIES OF PRODUCT				
Route of Entry: ALL Routes		--SKIN CONTACT --SKIN ABSORPTION --EYE CONTACT --INHALATION --INGESTION		
Effects of Acute Exposure:		Moderate dosage may cause severe headaches, dizziness, nausea, vomiting, and depression of the central nervous system. May cause vision disturbances.		
Effects of Chronic Exposure:		May cause visual impairment and progress to contraction of visual fields and sometimes complete blindness. The fatal internal dose is 60 - 250 ml.		
Irritancy of Product:	Mild Skin and Eye irritant	Exposure Limits of Product:	200 ppm (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):	Rubber	Eye(specify):	safety goggles	
Respiratory(specify):	not required in normal use.	Clothing:	not required	
Respiratory Protection:	If used indoors or on a continuous basis, use of cartridge type respirator is recommended			
Engineering Controls:	Local mechanical ventilation is recommended.			
Leak and Spill Procedure:	Remove all sources of ignition. Flush with large amounts of water. For large spills, dump to salvage tanks of incinerator			
Waste Disposal:	Dispose of at an approved waste disposal facility.			
Storage Requirements:	Keep away from open flames or sparks. Store in a cool place.			
Handling Procedures and				
Equipment:	Use of spark resistant tools and equipment is recommended.			
TDG Classification:	Consumer Commodity			
WHMIS Classification:	Consumer commodity	Complies with CCCR 2001.		
SECTION VIII-FIRST AID MEASURES				
Eye:	Flush with fresh water for at least 15 minutes. Seek immediate medical attention			
Skin:	Wash with soap and water.			
Inhalation:	Move patient to fresh air and restore breathing if required. Call a physician			
Ingestion:	If person conscious then give two glass of water. Do not give anything by mouth to unconscious person.			
Vomiting should be induce under the direction of Doctor. 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, 2009.	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