

SECTION I-MATERIAL IDENTIFICATION AND USE

Material Name/Identifier:	ACE Methyl Hydrate	Stock No.	984/985/986/989
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:	Methanol	Chemical Family:	Alcohol
Chemical Formula:	CH3OH	Trade Names & Synonyms:	Methyl Dydrate
Material Use:	Gasoline Antifreeze	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 (4hrs) rat-inh.

SECTION III-PHYSICAL DATA FOR MATERIAL

Physical State:	Liquid	Odour/Appearance:	Alcohol odour/Clear and colourless
Specific Gravity:	0.79	Odour Threshold(p.p.m.):	200 ppm
Boiling Point:	64.5°C	Evaporation Rate:	(Butyl acetate=1) 4.1
Freezing Point:	-97.8°C	Solubility in Water:	100%
% Volatile(by volume):	100%	Vapour Pressure(mm)Hg:	160mm @ 30°C
Vapour Density(Air=1):	1.105 @ 15°C	Coefficient of Water/Oil Distribut:	Readily soluble in water, separates from oil
pH	N/Av.		

SECTION IV-FIRE AND EXPLOSION HAZARD OF MATERIAL

Flammability Yes/No	Yes	If yes under which conditions?:	Excessive heat,sparks & open flames
Auto Ignition Temperature	385°C	Means of Extinguishing:	Carbondioxide, Dry chemical media for small fire. Water spray in a fog form, Alcohol resistant foam for large fire.
Flashpoint and Method:	11 oC, Tag CC	Hazardous Combustion Products:	Fumes, smokes, oxides of carbon & formaldhdyde.
Upper Flammable limit, % vol.	36.5	Lower Flammable Limit(% by volume):	6.0
Explosion Data:	Sensitivity to 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, bases and oxidizing agents 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

Routes 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 progresses to contraction of visual fields and sometimes complete blindness. Fatal internal dosage is 60 - 250 ml.		
LD 50 of product:	See Section II	LC 50 of Product:	See Section II
Irritancy of Product:	Skin and eye irritant	Exposure Limits:TWA-200 ppm, skin (ACGIH)	
Sensitization of Product:	N/Av.	Toxicologically Synergistic Materials:	N/Av.
--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):	NIOSH approved respirator.	Clothing:	not required
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 approvedhazardous waste disposal facility in accordance with local, provincial and federal regulation.		
Waste Disposal:	Dispose off at an approved waste disposal facility as per local or provincial regulation.		
Storage Requirements:	Keep away from open flames or sparks. Store in a cool place where temperature below 40 °C.		
Handling Procedures and	Keep away from children. Do not inhale or ingest.		
Equipment:	Use of spark-resistant tools and equipment recommended. Avoid inhalation of excessive vapour.		
DSL listing	Methanol is listed in the inventory.		
TDG Classification:	984 - Limited Quantity, 985/986/989 - Methanol, Class 3 (6.1), UN 1230 ,P/G II		
WHMIS Classification:	984/985 Consumer Commodity, 986/989 - B2, D1B, D2A, D2B	#984: Complies with CCCR 2001.	

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:	Janaury 2, 2015.	Kleen-Flo Tumbler Industries Limited

THIS SHEET SUPERSEDES ANY OTHER M.S.D.S. PREVIOUSLY PREPARED