

KLEEN-FLO TUMBLER INDUSTRIES LIMITED			MATERIAL SAFETY DATA SHEET		PAGE 1
<u>SECTION I-MATERIAL IDENTIFICATION AND USE</u>					
Material Name/Identifier:	Lock-De-Icer	Stock No.		612	
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:	Alcohol	Chemical Family:		Alcohol	
Chemical Formula:	N. Ap (Mixture)	Trade Names & Synonyms:		None	
Material Use:	Spray de-icer	Molecular Weight:		N. Ap (Mixture)	
<u>SECTION II-HAZARDOUS INGREDIENTS OF MATERIAL</u>					
Hazardous Ingredients	C.A.S.	Approximate Concentration	LD50 Species & Route	LC50 Species & Route	
Isopropyl Alcohol	67-63-0	60 - 100%	5045 mg/kg rat-oral	16000 ppm (4hr) rat-inh.	
Carbondioxide	124-38-9	5-10%	N. Ap	N/Av.	
<u>SECTION III-PHYSICAL DATA FOR MATERIAL</u>					
Physical State:	liquid aerosol	Odour/Appearance:	alcohol odour/ clear, colourless liquid		
Specific Gravity:	0.79	Odour Threshold(p.p.m.):	N/E		
Boiling Point:	82°C	Evaporation Rate:	1.4 (Butyl acetate=1)		
Freezing Point:	N/E	Solubility in Water:	85%		
% Volatile(by volume):	100	Vapour Pressure(mm)Hg:	33mmHg @68°F		
Vapour Density(Air=1):	N/E	Coefficient of Water/Oil Distribut:	N/E		
pH	N/Av.				
<u>SECTION IV-FIRE AND EXPLOSION HAZARD OF MATERIAL</u>					
Flammability Yes/No	Yes	If yes under which conditions:Open flame, spark, heat			
Auto Ignition Temperature:	N/E	Means of Extinction: Dry chemical, carbon dioxide foam			
Flashpoint and Method:	11°C	Hazardous Combustion Products: Oxide of carbon			
Upper Flammable limit (%vol)	12.7	Lower Flammable Limit (% by volume) 2			
Explosion Data:	Sensitivity to Mechanical Impact: N.Ap.	Sensitivity to Static Discharge:		N.Ap.	
<u>SECTION V-REACTIVITY DATA</u>					
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, Nitrofoam,Sulfuric acid.			
Reactivity and under what conditions?		Excessive heat, open flame, sprk, source of ignitions.			
Hazardous Decomposition Products:		Oxides of carbon.			
N/E: not established					
N/Av.: Not applicable					
N/Av. : not available					

