

SECTION I-MATERIAL IDENTIFICATION AND USE

| | | | |
|---------------------------|----------------------------------|-------------------------|-------------------------------|
| Material Name/Identifier: | Armashine Glass Kleen (Anti-Fog) | Stock No. | 269 |
| 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: | None |
| Material Use: | Cleaner | Molecular Weight: | N.Ap. (mixture) |

SECTION II-HAZARDOUS INGREDIENTS OF MATERIAL

| Hazardous Ingredients | C.A.S. | Approximate Concentration | LD50 Species & Route | LC50 Species & Route |
|-----------------------|----------|---------------------------|----------------------|--------------------------|
| Isopropanol | 67-63-0 | 1 - 5 % | 5045 mg/kg rat-oral | 16970 ppm (4hr) rat-inh. |
| 2-butoxyethanol | 111-76-2 | 1-5% | 1746 mg/kg rat-oral | 450 ppm (4hr) rat-inh. |

SECTION III-PHYSICAL DATA FOR MATERIAL

| | | | |
|------------------------|---------------|-------------------------------------|---------------------------------|
| Physical State: | Liquid | Odour/Appearance: | pleasant odour/clear, colorless |
| Specific Gravity: | 0.98 | Odour Threshold(p.p.m.): | N/E |
| Boiling Point: | N/Av. | Evaporation Rate: | N/E |
| Freezing Point: | < 0°C | Solubility in Water: | 100% |
| % Volatile(by volume): | N/E | Vapour Pressure(mm)Hg: | same as water |
| Vapour Density(Air=1): | same as water | Coefficient of Water/Oil Distribut: | N/Av. |
| pH | 6-9 | | |

SECTION IV-FIRE AND EXPLOSION HAZARD OF MATERIAL

| | | | |
|------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|
| Flammability Yes/No | No | If yes under which conditions?: | |
| Auto Ignition Temperature: | N/Av. | Means of Extinction: | water, carbon dioxide, dry chemical |
| Flashpoint and Method: | None | Hazardous Combustion Products: | Hydrocarbon fumes and smoke |
| Upper Flammable limit (%vol) | N/E | Lower Flammable Limit(% by volume): | N/E |
| Explosion Data: | Sensitivity to Mechanical Impact: No | Sensitivity to Static Discharge: | No |

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? | peroxides, Strong oxidizers, Strong acid |
| Reactivity and under what conditions? | Hot surfaces, open flame, fire | | |
| Hazardous Decomposition Products: | Carbon monoxide, carbon dioxide in fire | | |

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 mild eye or skin irritation. | | |
| Effects of Chronic Exposure: | None known | | |
| LD 50 of Product: | N/E | LC 50 of Product: | N/E |
| Irritancy of Product: | May cause eye irritation | 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): | Not required during normal use | Eye(specify): | Safety Glasses |
| Respiratory(specify): | Not required during normal use | Clothing: | Not required during normal use |
| Respiratory Protection: | If used indoor or on a continuous basis, use of NIOSH approved cartridge type respirator is recommended | | |
| Engineering Controls: | Local and mechanical ventilation. | | |
| Leak and Spill Procedure: | Flush away with plenty of water. | | |
| Waste Disposal: | Hose off to the sewage drain | | |
| Storage Requirements: | Keep container closed when not in use. | | |
| Handling Procedures and Equipment: | Handle with care. Eye irritant. Avoid contact with eyes. Do not inhale or ingest. Keep out of reach of children. Keep container closed well when not in use. | | |
| DSL listing | All components are listed in the inventory. | | |
| TDG Classification: | Not regulated | | |
| WHMIS Classification: | Not controlled | | |

SECTION VIII-FIRST AID MEASURES

| | |
|-------------|--|
| Eye: | Flush with water for at least 15 minutes. Get medical attention if irritation persists. |
| Skin: | Wash with soap and water. Seek medical help if irritation persist. |
| Inhalation: | Move patient to fresh air and restore breathing if required. See doctor if discomfort persist. |
| Ingestion: | DO NOT INDUCE VOMITING. Drink 1 or 2 glass of water, rinse mouth thoroughly., Seek medical help immediately |

SECTION IX-PREPARATION DATE OF M.S.D.S.

| | | |
|---------------------------|------------------|---|
| Additional Info/Comments: | | Sourced Used Supplier's data |
| Phone Number: | (905) 793-4311 | Prepared By: Quality Control Laboratory |
| Date Prepared: | January 2, 2012. | Kleen-Flo Tumbler Industries Limited |

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

N/Av.: not available

N/Ap.: not applicable

N/E: not established