

MATERIAL SAFETY DATA SHEET

SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION			
Material Identification: MicroKleen™ Spray & Equipment Cleaner AD1-919			
Adsil, Inc. 1901 Mason Avenue, Suite 101 Daytona Beach, FL 32117	386-274-1382 PHONE 386-274-1798 FAX CHEMTREC: 1-800-424-9300		
SECTION 2: OSHA HAZARDOUS COMPONENTS			
<u>C.A.S. Number(s)</u>	<u>Wt%</u>	<u>Components</u>	<u>Exposure Limits</u>
67-63-0	99% anhydrous	Isopropyl Alcohol	OSHA PEL: 400 ppm/500 STEL ACGIH TLV: 400 ppm/500 STEL
NFPA/HMIS Code: Health 2, Flammability 3, Reactivity 0			
SECTION 3: PHYSICAL DATA FOR MATERIAL			
<p>pH: Not Applicable (non-aqueous)</p> <p>Solubility in water: Complete</p> <p>Appearance: Clear Mobile Liquid</p> <p>Odor: Moderate Odor (alcohol)</p> <p>Specific Gravity @ 25C: 0.79</p> <p>Boiling Point: 180.0° F/82.0° C</p>			
SECTION 4: FIRE & EXPLOSION HAZARD OF MATERIAL			
<p>Flash Point: 53.0° F/12.0° C</p> <p>Fire Hazards: Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup, which could result in container rupture. Container areas exposed to direct flame should be cooled with large quantities of water as needed to prevent weakening of container.</p> <p>Unusual Fire Hazards: Releases flammable vapors below normal ambient temperatures. Vapors may be heavier than air. May travel long distances along the ground before igniting and flashing back to vapor source. When mixed with air and exposed to ignition source, vapors can burn in open or explode if confined.</p> <p>Extinguishing Media: Alcohol type foam; CO₂; Water spray; Water fog; Dry chemical.</p> <p>WARNING – Water can be used to cool and protect exposed material, however, water may not be capable of extinguishing the fire unless used under favorable conditions.</p> <p>Fire Fighting Procedures: Protective Equipment/Clothing – Do not enter fire area without proper protection. Use self-contained breathing apparatus and body-covering protective clothing.</p> <p>Instructions – Water may be ineffective in firefighting, due to low flash point. Although water soluble, may not be practical to extinguish fire by water dilution. Fight fire from a safe distance. Blanket with firefighting foam. Use water spray/fog for cooling. Avoid frothing/steam explosion. Burning liquid may float on water.</p>			
SECTION 5: HEALTH & HAZARD DATA			
<p>Eye Contact: May cause severe eye irritation.</p> <p>Skin Contact: No significant symptoms are expected to occur as a result of skin absorption exposure. May cause skin irritation – de-fatting action.</p> <p>Inhalation: Prolonged overexposure may cause coughing, shortness of breath, dizziness and intoxication.</p> <p>Ingestion: May be a health hazard if ingested in large quantities. Irritating to the gastrointestinal tract. May cause abdominal pain and vomiting. May cause central nervous system depression, low blood pressure, and rapid heartbeat.</p>			

Signs & Symptoms of Exposure: Burning pain in the nose and throat (inhalation); pain, redness and tearing (eye exposure); itching or burning (skin exposure). Central nervous system may be evidenced by giddiness, headache, dizziness and nausea. In extreme cases, unconscious, respiratory depression and death may occur. Potential liver damage may be evidenced by loss of appetite, jaundice and pain in the upper abdomen on the right side.

Special Hazards: Carcinogens – none known
 Teratogens – none known
 Mutagens – none known
 Reproductive Toxins – none known

SECTION 6: FIRST AID MEASURES

Eyes: In case of eye contact, flush with water for 15 minutes. Retract eyelids often. If irritation persists, get medical attention.

Skin: Flush with mild soap and water. If irritation persists, get medical attention.

Inhalation: If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Seek medical attention if discomfort persists.

Oral: Do not induce vomiting. Risk of damage to lungs exceeds poisoning risk. If large quantity swallowed, give lukewarm water (1/2 liter/pint) if victim is conscious. Obtain emergency medical attention.

Comments: Physician's Detoxification Procedure – administer an aqueous slurry of activated charcoal followed by a cathartic such as magnesium citrate or sorbitol.

SECTION 7: REACTIVITY DATA

Stability: Stable.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Heat, sparks, open flame, other ignition sources and oxidizing conditions.

Materials to Avoid: Sulfuric Acid; Nitroform; Aluminum Metals; Strong Oxidizing Agents.

SECTION 8: LEAK OR SPILL INFORMATION

Containment/Clean-up: Extremely flammable liquid. Release causes immediate fire/explosion hazard. Liquids/vapors may ignite. Extinguish all ignition sources. Equip responders with proper protection. Contain/collect rapidly to minimize dispersion. Impound/recover large land spill; soak up small spill with inert solids. Restrict water use for cleanup. Prevent flow to sewer/public waters. Product is inherently biodegradable.

SECTION 9: SPECIAL PROTECTION INFORMATION

Respiratory Protection: If exposure may or does exceed occupational exposure limits, use a NIOSH approved respirator to prevent overexposure. In accordance with 29 CFR 1910.134, use either an atmospheric supplying respirator or an air purifying respirator for organic vapors.

Gloves: Not normally considered a skin hazard. Where use can result in long term skin contact, wear latex gloves. Wash hands before eating, drinking, smoking or leaving work.

Eye Protection: Wear chemical splash goggles or face shield when possibility exists for eye contact due to splashing/spraying liquid, airborne particles or vapor. Contact lenses must not be worn.

Protective Equipment: Emergency eye wash station or eye wash bottle should be available in the immediate vicinity of any potential exposure.

Personal Hygiene: Wash hands before eating, drinking, smoking or using toilet facilities. Promptly remove soiled clothing and wash thoroughly before reuse.

SECTION 10: TRANSPORT INFORMATION

DOT Information (49 CFR 172.101)

Proper Shipping Name: ISOPROPANOL

Hazard Technical Name: ISOPROPANOL

Hazard Class: 3

UN Number: UN1219

Packing Group: II

SECTION 11: HANDLING & STORAGE

Handling: For Professional Use Only. Handle away from heat, sparks and open flame. Extinguish all ignition sources. Use non-sparking tools. Handle empty containers with care; vapor residue may be flammable or explosive.

Storage: Store away from heat, sparks, open flame and strong oxidizing agents. Do not store in aluminum containers. Material may attack some forms of plastic, aluminum or rubber.

SECTION 12: REGULATORY INFORMATION

EPA SARA Title III Chemical Listings:

Section 304 CERCLA Extremely Hazardous Substances: None

Section 304 CERCLA Hazardous Substances: None

Section 312 Hazard Class:

Acute: Yes

Chronic: No

Fire: Yes

Pressure: No

Reactive: No

Section 313 Toxic Chemicals:

Does not contain any chemical components with known C.A.S. numbers that exceed the DeMinimis reporting levels established by SARA Title III, Section 313 and 40 CFR 372.

Supplemental State Compliance Information

California

Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm.

None known.

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