

# P/N 29-0248-00

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## MATERIAL SAFETY DATA SHEET: IPA KLEAN KLOTH

**SECTION 1. PRODUCT IDENTIFICATION** / Call above number for more information.

Trade Names: Ozone Safe / IPA / Isopropyl Alcohol / Isopropanol 2 Propanol; Dimethyl Carbinol

Purpose: To remove dirt, magnetic debris and other contaminants from a variety of electronic equipment and surfaces.

CAS No: Mixture Formula: Mixture

## **SECTION 2. HAZARDOUS INGREDIENTS**

Hazardous Rating (NFPA 704)

Moderate Health Rating: 1                      Hazard Rating Scale  
Fire: 3    0=minimal    3=Serious  
Reactivity: 0                                    1=Slight     4=Severe  
Special: None                                    2=Moderate

Component	CAS No.	%	Exposure Limits, PPM			
			OSHA	ACGIH	Other	Hazard
Isopropyl Alcohol	67-63-0	99.7	400	400	500	Flammable
Water	7732-18-5	< .3	None	None	None	None

Boiling Point: 180 Degrees F.                      Specific Gravity: Water .789 @ 60.00 F  
Freezing Point: -128 Degrees F.                  Vapor Pressure: 33.000 mmHg @ 68.00 F  
Flash Point: 53.0 F (11.6 C) TCC

## **SECTION 3. PHYSICAL PROPERTIES**

See Above for Boiling Point; Vapor Pressure; Melting Point; Specific Gravity.

Appearance & Odor: Clear, Colorless Liquid- Medicinal Alcoholic Odor Vapor Density: (Air-1) 2.1 Water Solubility: 100

Evaporative Rate: (Butyl Acetate = 1): 3

## **SECTION 4. FIRST AID MEASURES**

If Inhaled: Remove to fresh air. Give artificial respiration if not breathing. Get medical attention.

Eye contact: Immediately flush eyes with lots of running water for 15 minutes while lifting the upper and lower eye lids occasionally. Get immediate medical attention.

Skin contact: Immediately wash skin with lots of soap and water.

Remove contaminated clothing and shoes; wash before reuse. Get medical attention if irritation persists after washing.

If swallowed: If conscious; immediately induce vomiting by giving 2 glasses of water and sticking a finger down the throat. Get immediate medical attention. Do not give anything by mouth to an unconscious or convulsing person. Keep the victim's head below their hips while vomiting so that they do not breathe the vomitus into the lungs.

## **SECTION 5. HEALTH HAZARD INFORMATION**

Primary routes of exposure: Skin or eye contact, Inhalation or Swallowed.

Signs and symptoms of exposure:

Inhalation: Vapors and mists irritate the nose and throat. Inhalation of higher concentrations may cause headaches, vomiting and coma. Inhalation of very high concentrations or prolonged exposure may cause unconsciousness or death.

Eye Contact: Vapors will irritate the eyes. Liquid and mists can severely irritate or damage the eyes and cause corneal burns.

Skin Contact: Brief contact may dry the skin, or cause burning or stinging sensation. Prolonged or repeated contact may irritate the skin and cause dermatitis.

Swallowed: Large quantities causes headaches, nausea, vomiting, stomach cramps and diarrhea, and perhaps unconsciousness or death.

Chronic effects of exposure: Prolonged or repeated exposure to high concentrations can produce severe or fatal CNS depression.

Medical conditions generally aggravated by exposure: Persons with pre-existing skin disorders, eye problems, or impaired respiratory function may be more susceptible to the effects of this substance.

## **SECTION 6. TOXICITY DATA**

Oral: Rat LD50 = 5840 mg./Kg: Human single lethal dose = 250 ml.

Dermal: Rabbit LD 50 = 13 gm/Kg

Inhalation: Rat LC50 = 16,000 ppm/ Shr

Carcinogenicity: This material is not considered to be a carcinogen by the National Toxicology Program, the International Agency for Research on Cancer, or the Occupational Safety and Health Administration.

Other Data: None

## SECTION 7. PERSONAL PROTECTION

**Ventilation:** Local mechanical exhaust ventilation capable of maintaining emissions at the point of use below the PEL.

**Respiratory Protection:** If use conditions generate vapors or mists, wear a NIOSH-Approved respirator appropriate for those emission levels. Appropriate respirators may be a full facepiece or a half mask air purifying cartridge respirator equipped for organic vapors/mists, a self contained breathing apparatus in the pressure demand mode, or a supplied air respirator.

**Eye Protection:** Chemical Goggles unless a full facepiece respirator is also worn. It is generally recognized that contact lenses should not be worn when working with chemicals because contact lenses may contribute to the severity of the eye injury.

**Protective Clothing:** Long sleeve shirt, trousers, safety shoes, rubber gloves and rubber apron.

**Other Protective Measures:** An eyewash and safety shower should be nearby and ready for use.

## SECTION 8. FIRE AND EXPLOSION INFORMATION

**Flammable limits in air:** Lower, 2%; Upper, 12.7%

**Extinguishing media:** Use water spray, dry chemical, 002 or alcoholic foam. Do not use a direct water stream.

**Special Fire Fighting Procedures:** Fire fighters should wear a self-contained breathing apparatus and full protective clothing. Use water spray to cool nearby containers and structures exposed to fire.

**Unusual Fire and Explosion Hazards:** Extinguish all nearby sources of ignition because vapors may be moved by air currents to ignition sources distant from the handling point.

## SECTION 9. HAZARDOUS REACTIVITY

**Stability:** Stable                      **Polymerization:** Will not occur

**Conditions to avoid:** Heat, sparks and open flames.

**Materials to Avoid:** Strong oxidizers, aluminum, acetaldehyde, chlorine, ethylene oxide, hydrogen-palladium combination, H<sub>2</sub> O<sub>2</sub>-H<sub>2</sub> S<sub>04</sub> Combination, Hypochlorous acid, isocyanates, nitroform, phosgene, oleum, per-chloric acid, potassium T-Butoxide, acids, alkalis, amines, halogens, halogen compounds, anhydrides and aldehydes.

**Hazardous Decomposition Products:** May liberate carbon monoxide or carbon dioxide.

**SECTION 10. SPILL, LEAK AND DISPOSAL PROCEDURES** Actions to take for spills or leaks: Wear protective equipment including rubber boots, rubber gloves, rubber apron and a self contained breathing apparatus in the pressure demand mode or a supplied air respirator. If the spill or leak is small, a full-face piece air purifying cartridge respirator equipped for organic vapors may be satisfactory. In any event, always wear eye protection. Extinguish all ignition sources and insure that all handling equipment is electrically grounded. For small spills or drips, mop or wipe up and dispose of in a DOT Approved waste container. For large spills, contain by diking with soil or other non-combustible absorbent materials and then pump into DOT Approved waste containers, or absorb with non-combustible sorbent material, place residue in DOT Approved waste containers. Keep out of sewers, storm drains, surface waters and soils. Comply with all applicable governmental regulations on spill reporting and handling and disposal of waste.

**Disposal Methods:** Dispose of contaminated Product and materials used in cleaning up spills or leaks in a manner approved for this material. Consult appropriate Federal, State and Local Regulatory agencies to ascertain proper disposal procedures. Note: Empty containers can have residues, gases and mists and are subject to proper waste disposal, as above.

## SECTION 11. SPECIAL PRECAUTIONS

**Handling and Storage Precautions:** Keep away from heat, sparks and flames. Store in a cool, dry well-ventilated place away from incompatible materials. Vent container frequently and more often in warm weather to relieve pressure. Electrically ground all equipment when handling this product and use only non-sparking tools. Keep container tightly closed when not in use. Do not use pressure to empty container. Wash thoroughly after handling. Do not get in eyes, on skin or on clothing.

**Repair and Maintenance Precautions:** Do not cut, grind, weld or drill on or near this container.

**Other Precautions:** Containers, even those that have been emptied; will retain product residue and vapors. Always obey hazard warnings and handle empty containers as if they were full.

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