

Material Safety Data Sheet

May be used to comply with
OSHA's Hazard Communication
Standard
29 CFR 1910.1200. Standard
must be consulted for specific
requirements

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

End-user copy

IDENTITY

Head Cleaning Pen

Part No. 203502-00X, 205431-XXX

Section 1

<i>Manufacturer's Name</i> Printronix, Inc.	<i>Emergency Telephone Number</i> (714) 368-2589
<i>Address (Number, Street, City, State, and ZIP Code)</i> 14600 Myford Road	<i>Telephone number for information</i> (714) 368-2573
Irvine, CA 92606	<i>Date Prepared</i>
	<i>Signature of Preparer (Optional)</i> <i>Robert J. Bilanchione</i>

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity: Common Name(s))	CAS#	OSHA PEL	ACGIH TLV	Other Limits	
				Recommended	% (Optional)
Isopropyl Alcohol	67-63-0	400	400	500 (ACGIH STEL)	99.7
Water	7732-18-5	-	-	-	< 0.3

Health Rating 1
Fire 3
Reactivity 0
Special None

Section III - Physical/Chemical Characteristics

<i>Boiling Point:</i>	81°F	<i>Specific Gravity (H₂O = 1)</i>	.789
<i>Vapor Pressure (mm Hg/20 °C.):</i>	33	<i>Melting Point:</i>	N/A
<i>Vapor Density (AIR = 1):</i>	2.1	<i>Evaporation Rate (Butyl Acetate = 1):</i>	3
<i>Solubility in Water:</i> 100			
<i>Freezing Point:</i> 128°F			

Appearance and Odor: Clear, Colorless Liquid; Medicinal Alcohol Odor

Flash Point: 55 °F

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used):	Flammable Limits:	LEL: 2%	UEL: 12.7%
----------------------------	-------------------	---------	------------

Extinguishing Media: Use water spray, dry chemical, CO₂ or alcoholic foam. Do not use 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 V - Reactivity Data

Stability	Unstable		Conditions to avoid : Heat, sparks, and open flames.
	Stable	X	
<i>Incompatibility (Materials to avoid):</i> Strong oxidizers, aluminum, acetaldehyde, chlorine, ethylene oxide, hydrogen-palladium combination, H ₂ O ₂ -H ₂ SO ₄ Combination, Hypochlorous acid, isocyanates, nitroform, phosgene, oleum, perchloric acid, potassium T-Buloxide, acids, alkalis, amines, halogens, halogen compounds, anhydrides and aldehydes.			
<i>Hazardous Decomposition or Byproducts:</i> May liberate carbon monoxide or carbon dioxide.			
Hazardous Polymerization:	May Occur		Conditions to Avoid
	Will Not Occur	X	

Section VI - Health Hazard Data

<i>Route(s) of Entry:</i> Skin or eye contact, Inhalation or Swallowing			
<i>Health Hazards (Acute and Chronic):</i> Prolonged or repeated exposure to high concentrations can produce severe or fatal CNS depression.			
<i>Carcinogenicity:</i>	<i>NTP?</i>	<i>IARC Monographs?</i>	<i>O SHA Regulated?</i>
<i>Signs and Symptoms of Exposure:</i> <i>Skin contact:</i> Brief contact may dry the skin, or cause a burning or stinging sensation. Prolonged or repeated contact may irritate the skin and cause dermatitis. <i>Eye contact:</i> Vapors will irritate the eyes. Liquid and mists can severely irritate or damage the eyes and cause corneal burns. <i>Inhalation:</i> 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. <i>Swallowed:</i> Swallowing large quantities causes headaches, nausea, vomiting, stomach cramps and diarrhea, and perhaps unconsciousness or death.			
<i>Medical Conditions</i> <i>Generally Aggravated by Exposure:</i> Persons with pre-existing skin disorders, eye problems, or impaired respiratory function may be more susceptible to the effects of this substance.			
<i>Emergency and First Aid Procedures:</i> <i>If inhaled:</i> Remove to fresh air. Give artificial respiration if not breathing. Get immediate medical attention. <i>In case of eye contact:</i> Immediately flush eyes with lots of running water for 15 minutes while lifting the upper and lower eye lids occasionally. Get immediate medical attention. <i>In case of skin contact:</i> 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. <i>If swallowed:</i> 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 vomit into the lungs.			

Section VII - Toxicity Data

<i>Oral:</i> Rat LD50 = 5840 mg./Kg; Human single lethal dose = 250 ml.
<i>Dermal:</i> Rabbit LD 50 = 13 gm/Kg
<i>Inhalation:</i> Rat LC50 = 16,000 ppm/Shr
<i>Carcinogenicity:</i> 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.

Section VIII - Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled: 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: 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 waster 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.

Waste Disposal Method: 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.

Precautions to be Taken in Handling and Storing: 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.

Other Precautions:

Section IX - Control Measures

Respiratory Protection (Specify Type): 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.

Ventilation

Local Exhaust

Special:

Mechanical (General): Local mechanical exhaust ventilation capable of maintaining emissions at the point of use below the PEL.

Other:

Protective Gloves: Rubber gloves

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.

Other Protective Clothing or Equipment: Long sleeve shirt, trousers, safety shoes, rubber gloves and rubber apron.

Work/Hygienic Practices: An eyewash and safety shower should be nearby and ready for use.

Section X - Special Precautions

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.

Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of the knowledge and belief of Printronix, Inc., but is not guaranteed to be so. Since conditions of use are beyond the control of Printronix, Inc., no warranties are made, expressed or implied, except those that may be contained in the written contract of sale or acknowledgement. It is the user's responsibility to determine the suitability of this material for a specific purpose and to adopt such safety precautions as may be necessary.
