



Cleaning Pen MSDS

MATERIAL SAFETY DATA SHEET

Product Name : Thermal Printer Head Cleaning Pen

Product Number : IPACP-03

General Use : Technical Cleaning

Product Description : Thermal Printer Cleaning Pen Barrel is filled with 99.9% Electronic Grade IPA Solution

SECTION I - Manufacturer's Name & Address

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Complies with OSHA's Hazard Communication
Standard 29 CFR 1910.1200

SECTION II - Hazardous Ingredients / Identity Information

Hazardous Components	CAS#	OSHA PEL.	ACGIH TLV	%
Isopropyl alcohol	67-63-0	500 ppm	STEL	91%

This Product contains the following chemicals subject to the reporting requirements of SARA 313 and 40 CFR 372: NONE

SECTION III - Hazardous Identification

Appearance & Odor: Colorless, mobile liquid. Mild odor.

Health Hazards: Can cause severe lung damage and may be fatal if swallowed. Causes eye irritation. May be harmful if swallowed. May cause CNS depression.

Physical Hazards: FLAMMABLE. Vapors are heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger.

SECTION IV - Emergency and First Aid Procedures:

EYE AND SKIN CONTACT: Flush with plenty of water.

INHALATION: Remove to fresh air; if breathing is difficult administer oxygen.

INGESTION: If conscious, drink large quantities of water. Do not induce vomiting.



SECTION V - Fire and Explosion Hazard Data Technical

Flash Point (Method Used) : TCC 53° F
Flammable Limits : LEL 2.0 UEL 12.7
Extinguishing Media : CO2, Water, Dry Chemical

Special Fire Fighting Procedures: Fire fighters should wear a NIOSH approved, pressure demand, self-contained breathing apparatus. Flammable vapors can be dispersed with water spray.

Unusual Fire and Explosion Hazards: Vapors are extremely flammable and can be ignited upon contact with a spark, flame, or a source of heat. Vapors are heavier than air and will travel along ground.

Work/Hygienic Practices: Do not eat, drink or smoke in work areas.

SECTION VI - Accidental Release Measures

FLAMMABLE. Vapors are flammable and heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger.

Protective Measures:

Evacuate area of unprotected personnel. Eliminate potential sources of ignition (no smoking, flares, sparks or flames in immediate area). Stay upwind and keep out of low areas. Handling equipment must be bonded and grounded to prevent sparking. Wear appropriate personal protective equipment (refer to Section 8) when responding to spills.

Spill Management:

Shut off source of leak if safe to do so. Dike and contain spill. Use water spray (fog) to reduce vapors or divert vapor cloud drift. If vapor cloud forms, use water fog to suppress or blanket spill area with foam. Remove with vacuum trucks or pump to storage/salvage vessels. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.

Flush area with water to remove trace residue. Contain run-off from residue flush and dispose of properly. Prevent entry into waterways, sewer, basements or confined areas.

For small spills: Soak up residue with an absorbent such as clay, sand or other suitable material. Place in non leaking container and seal tightly for proper disposal.

Disposal:

Proper disposal should be evaluated based on regulatory status of this material (refer to section 13), potential contamination from subsequent use and spillage, and regulations governing disposal in the local area.

Reporting:

Notify authorities if any exposures to the general public or environment occurs or is likely to occur.



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SECTIONS VII - Handling and Storage

Do not taste or swallow. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

Handling:

Surfaces that are sufficiently hot may ignite liquid material. Vapors are flammable and heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger. Do not store or handle in aluminum equipment at temperatures above 120° F (48.9° C).

Keep away from heat, sparks and flame. Extinguish pilot lights, cigarettes and turn off other sources of ignition prior to use and until all vapors have dissipated. Use explosion-proof ventilation to prevent vapor accumulation while in use. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. Air-dry contaminated clothing in a well ventilated area before laundering. Static electricity may accumulate and create a fire hazard.

Bond and ground handling equipment and transfer containers to prevent sparking.

Storage:

Keep containers closed when not in use.

Ground fixed equipment.

Container Warnings:

Containers, even those that have been emptied, can contain explosive vapors. Do not cut, drill, grind, weld or perform similar operations on or near containers.

SECTION VIII - Exposure Controls/Personal Protection

Material	Source	TWA	STEL
Isopropyl Alcohol	ACGIH - TLV	400 ppm (v)	500 ppm (v)
Isopropyl Alcohol	OSHA - PEL	400 ppm (v)	500 ppm (v)
Isopropyl Alcohol	OSHA - PEL - Interim Standard	400 ppm (v)	

Respiratory Protect (specify type): NIOSH approved self-contained breathing apparatus for concentrations above TLV limits (not necessary with normal use).

Ventilation: Local Exhaust: If needed to maintain workable concentration below permissible exposure limits.

Mechanical (general) See Above

Special:

Other:

Protective Gloves: Polyethylene, Neoprene or Polyvinyl alcohol

Eye Protection: Splash proof goggles

Other Protective Clothing or Equipment: Eye-wash fountain in immediate area. Personnel protective clothing and use of equipment must be in accordance with 29 CFR 1910.33 and 1910.134.

Work/Hygienic Practices: Do not eat, drink or smoke in work areas.



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SECTION IX - Physical / Chemical Characteristics

Physical/Chemical Characteristics

Boiling Point :	180° F	VOC :	787 grams/liter
Melting Point :	N/A	Specific Gravity :	0.78
Evap. Rate (water = 1) :	>1	Solubility in Water :	Infinite
Vapor Density (AIR=1) :	2.1	Appearance and Odor :	Clear, colorless liquid, sharp alcohol odor

Other Precautions: Avoid contact with strong oxidants. Do not use cutting torch on empty container. Do not smoke when using product. Intentional misuse by deliberately concentrating and inhaling vapor contents can be harmful or fatal.

SECTION X - Reactivity Data

Stability : Stable

Conditions to Avoid : None known

Hazardous Polymerization : Will not occur

Incompatibility (Materials to avoid) : Strong oxidizing agents, halogens, strong inorganic acids, aldehydes, and halogen compounds.

Hazardous Decomposition or Product : May form carbon dioxide and carbon monoxide, various hydrocarbons.

SECTION XI - Toxicological Information

Material Tested	Effects	Test Results
Isopropyl Alcohol	Dermal - LD50	12.87 g/kg (Rabbit)
Isopropyl Alcohol	Inhalation - LC50	19000 ppm (v) (Rat) 8 hour(s)
Isopropyl Alcohol	Oral - LD50	4.7 g/kg (Rat)

Eye Irritation:

Moderate irritation [Rabbit]

Skin Irritation:

Mild irritation [Rabbit]

Repeat Dose Testing:



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In subchronic testing of IPA via the inhalation route, rats and mice exhibited reversible CNS effects, increases in mortality rate, increases in body weight, and effects of the liver and kidney.

The organ effects were likely normal physiologic adaptive changes (liver) or unique rodent pathologic responses (kidney) to the high dose of IPA.

Reproductive and Developmental Toxicity:

IPA was not a primary reproductive or developmental toxicant in animal studies, but pregnant rabbits seemed more susceptible to IPA toxicity than non-pregnant animals.

Other Information:

Laboratory animals administered high doses of IPA in combination with known hepatotoxic chemicals exhibited enhanced liver toxicity.

SECTION XII - Environmental Fate and Effects

This section will be updated as ecological reviews are completed.

SECTION XIII - Disposal Considerations

Product Disposal:

Under EPA RCRA (40 CFR 261) if this material becomes a waste material, it would be an ignitable hazardous waste, hazardous waste number D001. Refer to the latest EPA or state regulations regarding proper disposal.

SECTION XIV - Transportation Information

US Department of Transportation Classification:

This information has been gathered from: ecfr.gpoaccess.gov
Title 49 Transportation, Regulations Relating to Transportation 100-185, Subchapter C-Hazardous Materials Regulations 172, Special Provisions 172.102, Special Provision #47 - see below for special provision 47:

Description	Hazard class or Div.	UN # class	label codes	Special Provisions
Solids containing flammable liquid, n.o.s.	4.1	UN3175 II	4.1.....	47

Special Provisions

47) Mixtures of solids which are not subject to this subchapter and flammable liquids may be transported under this entry without first applying the classification criteria of Division 4.1, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each packaging must correspond to a design type that has passed a leak proofness test at the Packing Group II level. Small inner packagings consisting of sealed packets containing less than 10 ml of a Class 3 liquid in Packing Group II or III absorbed onto a solid material are not subject to this subchapter provided there is no free liquid in the packet.



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International Air Transport Association (IATA) Dangerous Goods Regulations:

Section 4.4 Special Provisions

A46) Mixtures of solids which are not subject to these regulations and flammable liquids may be transported under this entry without first applying the classification criteria of Division 4.1, providing there is no free liquid visible at the time the substance is packaged and the packaging must pass a leak proofness test at the Packing Group II level. Small inner packagings consisting of sealed packets containing less than 10 mL of a Packing Group II or III flammable liquid absorbed into a solid material are not subject to these regulations provided there is no free liquid in the packet.

The words "Not Restricted" and the Special Provision number must be indicated in the description substance on the Air Waybill as required by 8.2.6.

SECTION XV - Regulatory Information:

The regulatory information provided is not intended to be comprehensive. Other federal, state and local regulations may apply to this material.

Federal Regulations:

Resource Conservation & Recovery Act (RCRA) Classification:

D001 (Ignitable Hazardous Waste).

Superfund Amendment & Reauthorization Act (SARA) Title III:

SARA Hazard Categories(311/312):

Fire Hazard. Immediate (Acute) Health Hazard.

SARA Toxic Release Inventory(TRI) (313):

Toxic Substances Control Act (TSCA) Inventory Status:

This material is listed on the EPA TSCA Inventory of Chemical Substances.

SECTION XVI – Other Information

NFPA Rating (Health, Fire, Reactivity): 1, 3, 0

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