



**MATERIAL SAFETY DATA SHEET**  
**Black Ethanol Ink**  
**300-4001-001**

**SECTION I - PREPARATION INFORMATION**

**Product Name** Black Ethanol Ink  
**Product Code** 300-4001-001  
**Emergency Phone** contact CHEMTREC at (800) 424-9300

**Original document date:** 05/05

**Date of revisions:** 00/00

**SECTION II - IDENTIFICATION**

**Product Name** Black Ethanol Ink  
**Product Use** Ink Jet Printers  
**Description** Dark liquid with solvent odor

**HAZARDOUS MATERIAL IDENTIFICATION SYSTEM (HMIS)**

**HAZARD RATINGS:** 0 Minimal 1 Slight 2 Moderate 3 Serious 4 Extreme B Hand & Eye Protection  
**HEALTH 1 FLAMMABILITY 3 REACTIVITY 0 PERSONAL PROTECTION B**

**NOTICE:** These ratings are for general rapid interpretation. The end-user is responsible for determining the proper protective procedures.

**SECTION III - HAZARDOUS INGREDIENTS**

<b>Ingredient</b>	<b>CAS#</b>	<b>%</b>	<b>TLV*</b>	<b>PEL*</b>	<b>LD<sub>50</sub>** (g/kg)</b>	<b>LC<sub>50</sub>** (g/m<sup>3</sup> per 8hr)</b>
Ethanol	64-17-5	40 - 70	1000	1000	7.0	20,000ppm/10h
Isopropanol	67-63-0	1 - 5	400	400	5.04	12,000ppm/ 8hr
Acetone	67-64-1	1 - 5	750	750	5.8	50,100mg/m <sup>3</sup>

**SECTION IV - PHYSICAL DATA**

<b>Boiling Range</b>	78° C
<b>Melting Range</b>	-130° C
<b>Freezing Range</b>	-130° C
<b>Vapor Pressure</b>	44 mm of Hg @ 20° C
<b>Vapor Density (Air=1)</b>	Greater than air
<b>Solubility In Water</b>	Miscible
<b>Solubility In Organic Solvents</b>	Miscible
<b>Specific Gravity (Water=1)</b>	0.887
<b>Percent Volatile By Volume (%)</b>	72.12%
<b>Evaporation Rate (N-Butyl Acetate=1)</b>	1.9
<b>pH in concentrate</b>	Not Applicable
<b>pH in dilution as used</b>	Not Applicable
<b>Appearance And Odor</b>	Dark liquid with solvent odor
<b>Odor Threshold</b>	Not Available

**SECTION V - FIRE AND EXPLOSION HAZARD**

**Flash Point (Tcc)**

11° C

<b>Auto Ignition Temperature</b>	422° C
<b>Upper Flammable Limit (%By Vol.)</b>	19
<b>Lower Flammable Limit (%By Vol.)</b>	3.3
<b>Hazardous Combustion Products</b>	Carbon Monoxide, Carbon Dioxide
<b>Extinguishing Media</b>	Regular foam or dry chemical
<b>Explosion Data (Sensitive To Mechanical Impact)</b>	No
<b>Explosion Data (Sensitive To Static Discharge)</b>	Yes

**FIRE FIGHTING PROCEDURES:** Wear self-contained breathing apparatus with full facepiece operated in the positive pressure demand mode.

## SECTION VI - REACTIVE DATA

<b>Condition Of Instability</b>	None Known
<b>Incompatibility</b>	Strong oxidizing agents
<b>Conditions Of Reactivity</b>	Not applicable
<b>Hazardous Decomposition Products</b>	Carbon Monoxide, Carbon Dioxide

## SECTION VII - TOXICOLOGICAL PROPERTIES (HEALTH HAZARD)

**ROUTES OF ENTRY:** Skin contact, skin absorption, ingestion, inhalation, and eyes

### EFFECT OF ACUTE EXPOSURE:

<b>Eyes</b>	May cause extreme eye irritation. Symptoms may include burning, tearing, redness, swelling and eye damage.
<b>Skin</b>	Exposure may cause skin irritation. Prolonged or repeated exposure may dry the skin. Symptoms may include redness, burning, drying, cracking, and skin damage.
<b>Breathing</b>	Excessive inhalation of vapors can cause nasal and respiratory irritation. Central nervous system effects include dizziness, weakness, fatigue, nausea, headache, possible unconsciousness and even death. Inhalation of material into the lungs can cause chemical pneumonitis, which can be fatal.
<b>Swallowing</b>	Can cause gastrointestinal irritation, nausea, vomiting, diarrhea, blindness and death.
<b>Exposure Limits</b>	See section III
<b>Sensitization To Product</b>	Not Available
<b>Carcinogenicity</b>	Not Available
<b>Reproductive Toxicity</b>	Not Available
<b>Teratogenicity</b>	Not Available
<b>Mutagenicity</b>	Not Available
<b>Toxicological Synergistic Products</b>	None known

### EFFECTS OF CHRONIC EXPOSURE:

**Ethanol** - Nausea, vomiting, flushing, mental excitement or depression, drowsiness, impaired perception, uncoordination, stupor, coma and death may occur.

**Acetone** - A skin and severe eye irritant. Experimental reproductive effects. Narcotic in high concentration.

**Isopropanol** - Ingestion or inhalation of large quantities of vapor may cause flushing, headache, dizziness, mental depression, nausea, vomiting, narcosis, anesthesia, coma and death.

## SECTION VIII - PREVENTATIVE MEASURES

### PERSONAL PROTECTION:

<b>Respiratory protection</b>	If workplace exposure limit(s) of product or any other component is exceeded, a NIOSH/OSHA approved respirator is advised. (See your safety
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	equipment supplier for specific details.)
<b>Ventilation</b>	Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below PEL/ TLV.
<b>Protective gloves</b>	Wear chemical resistant gloves. (Consult your safety equipment supplier.)
<b>Eye protection</b>	Wear chemical splash goggles in compliance with OSHA regulations. However, OSHA regulations also permit other types of safety glasses.
<b>Other protective equipment</b>	Wear impervious clothing and boots to prevent prolonged exposure.

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Keep away all sources of ignition from spill. If spill is indoors, ventilate areas of spill and soak up the spill with absorbent material. Do not let spilled or leaking material enter watercourse.

**DISPOSAL METHOD:** Absorb in vermiculite, floor absorbent or other absorbent material and dispose in licensed facility. Observe all federal, state and local regulations.

**HANDLING AND STORAGE:** Protect from freezing. Overheating may cause container to rupture. Covered storage is preferable.

**SPECIAL SHIPPING INFORMATION:** SEE SECTION X

## **SECTION IX - FIRST AID MEASURES**

<b>Oral Ingestion</b>	Seek immediate medical attention.
<b>Eye Contact</b>	Flush with water for 15 minutes and seek medical attention.
<b>Skin Contact</b>	Wash with soap and water. Wash contaminated clothing before reuse.
<b>Skin Absorption</b>	If skin irritation persists, seek medical attention.
<b>Inhalation</b>	Remove to fresh air, give artificial respiration and seek medical attention.
<b>Effects Of Overexposure</b>	May cause headaches if inhaled. Seek medical attention. If swallowed, can cause drunken-type behavior followed by severe systemic illness.

**SECTION X - TRANSPORTATION**

<b>DOT / TDG Proper Shipping Name</b>	UN1210 Printing Ink
<b>DOT / TDG Hazard Class</b>	3
<b>DOT / TDG Label</b>	Flammable Liquid

**SECTION XI - DISCLAIMER**

All information, recommendations, and suggestions appearing herein concerning this product are based upon data obtained from the manufacturer and/or recognized technical sources; however, Citronix makes no warranty, representation, or guarantee as to the accuracy, sufficiency, or completeness of the material set forth herein. It is the user's responsibility to determine the safety, toxicity and suitability of his/her own use, handling and disposal of the product. Additional product literature may be available upon request. Since actual use by others is beyond our control, no warranty, express or implied, is made by Citronix as to the effects of such use, the results to be obtained or the safety and toxicity of the product, nor does Citronix assume any liability arising out of use by others of the product referred to herein. The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

\*NIOSH Publication #94-116   \*\*Sax's Dangerous Properties of Industrial Mtls. 10th Ed.