

# MATERIAL SAFETY DATA SHEET

MSDS ID#: 100256

Date Prepared: October 16, 2006

Revision:

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** PX-370A BLACK INK

**Product Code:** I0540

**Colors Covered:** Black

**Supplier Name:** Matthews International Corporation

**Address:** 101 Fairview Avenue

**City:** Pittsburgh

**State/Zip:** Pennsylvania, USA, 15238

**Phone:** (412)665-2500

**Fax:** (412)828-3641

**24 Hour Emergency Phone:** (412)456-7499

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

<input type="checkbox"/> Substance	<input checked="" type="checkbox"/> Mixture					
<u>Hazardous Components</u>	<u>Percent</u>	<u>CAS No.</u>	<u>TLV</u>	<u>Carcinogen</u>	<u>R-Phrase</u>	<u>S-Phrases</u>
Ethylene glycol monobutyl ether	5-10	111-76-2	25 ppm	No	20/21/22;36/38	36/37;46

## 3. HAZARDS IDENTIFICATION

**Most Important Hazards:** Harmful if inhaled, absorbed through the skin, or swallowed. May cause blood disorders based on animal data. Causes eye irritation. Combustible liquid and vapor. Potential peroxide former.

**Main Symptoms of Overexposure:** EYES- Causes noticeable pain, severe irritation and transient corneal injury; SKIN- May cause slight irritation if left in contact with skin; INHALATION- Exposure may cause respiratory tract irritation and CNS effects including headache and nausea; INGESTION- This material is low to moderately toxic. May cause headache, dizziness, gastrointestinal distress, metabolic acidosis, liver and kidney damage. In animals, effects have been reported to the following organs: blood (hemolysis), secondary effects to the kidney and liver. Human red blood cells have been shown to be less sensitive to hemolysis than those of rodents and rabbits.

HMIS- H-2, F-0, R-0

## 4. FIRST AID MEASURES

**Inhalation:** Remove to fresh air. If breathing is difficult have trained person administer oxygen. Get medical attention.

**Skin Contact:** Immediately remove contaminated clothing and shoes. Flush skin with cool water for at least 15 minutes. Wash thoroughly with soap and water. Wash clothing before reuse.

**Eye Contact:** Immediately flush eyes with water for at least 15 minutes, forcibly holding eyelids apart to ensure complete irrigation of the eye and lid tissue. Get medical attention.

**Ingestion:** Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.

## 5. FIRE-FIGHTING MEASURES

**Extinguishing media:** Water spray, dry chemical, carbon dioxide, alcohol foam.

**Specific Hazards:** Combustible liquid. Keep away from heat and flame.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Eliminate all ignition sources.

**Environmental precautions:** Prevent runoff from entering drains, sewers or streams.

**Methods of cleaning up:** Dike area to contain spill. Recover spilled material with absorbent and place in approved containers for disposal. DO NOT FLUSH TO SEWERS.

## 7. HANDLING AND STORAGE

**Handling-Precautions:** Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.

**Safe handling Advice:** Keep away from heat, sparks and flames. When handling use only grounded and bonded equipment.

**Storage-Conditions:** Store in a cool, well ventilated area away from incompatible materials. Do not store in open, unlabeled or mislabeled containers.

**Incompatible Products:** Acids, alkalis, strong oxidizing agents, lime, ammonia, organic amines, chlorates, chlorine, sodium hydroxide.

### 8. EXPOSURE CONTROL/PERSONAL PROTECTION

**Engineering Measures:** Good general ventilation (10 air changes/hour) should be used. Use local exhaust ventilation or other engineering controls to maintain airborne levels below recommended exposure limits.

**Personal Protective Equipment:** Eliminate all ignition sources.

**Respiratory Protection:** If engineering controls do not maintain concentrations below recommended exposure limits, an approved respirator should be worn.

**Hand Protection:** Where prolonged or repeated skin contact occurs, impervious gloves should be worn. Type: Butyl rubber.

**Eye Protection:** Wear safety glasses with side shields (or goggles). A face shield is recommended

**Skin and Body Protection:** Chemical resistant clothing when potential for splash or contact exists. Emergency eyewash fountains and safety showers should be in the vicinity of any possible exposure.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Liquid

**Flashpoint:** N/A

**Density:** 1.00

**Vapor Density:** 4.0 (for Ethylene glycol monobutyl ether)

**Boiling Point:** 171° C (340° F) (for Ethylene glycol monobutyl ether)

**V.O.C.:** 100 g/l

**Color:** Black

**Autoignition temperature:** N/A

**Vapor Pressure:** .4 mm Hg (for Ethylene glycol monobutyl ether)

**Solubility in Water:** miscible

**Freezing Point:** N/A

**Evaporation rate(Butyl Acetate=1):** 0.1 (for Ethylene glycol monobutyl ether)

**Odor:** Mild ether odor

**pH:** N/A

### 10. STABILITY AND REACTIVITY

**Stable:** Stable, however may form peroxides of unknown nature

**Conditions to avoid:** Avoid heat, sparks, and open flames.

**Materials to avoid:** Strong oxidizing agents.

**Hazardous decomposition products:** Carbon dioxide, carbon monoxide.

### 11. TOXICOLOGICAL INFORMATION

**Acute toxicity:** Oral LD50 (rat) - 1746 mg/kg; Oral LD50 (rabbit)- 220 mg/kg; Inhalation LC50 (rat)-700 ppm (7 hour).; Dermal LD50 (rabbit)- 400 mg/kg; Eye irritation- Conjunctival irritation and transient corneal injury; Skin irritation- prolonged contact removes skin oils

**Chronic Toxicity:** Prolonged exposure to high concentrations in air may result in the inhalation of harmful amounts. Acidosis and changes in kidney and liver may occur. The primary site of toxic action was the red blood cells with secondary change in the kidneys and liver.

**Target Organs:** Eyes, Skin, Respiratory System, Central Nervous System, Hematopoietic System, Blood, Kidneys, Liver, Lymphoid System (from Ethylene Glycol Monobutyl Ether).

**Sensitization:** No

**Specific Effects:** Did not cause birth defects in lab animals. Has been toxic to the fetus in lab animals at doses toxic to the mother. In vitro studies were predominantly negative. Animal genetic toxicity studies were negative.

### 12. ECOLOGICAL INFORMATION

**Possible Environmental Effects:** N/A

### 13. DISPOSAL CONSIDERATIONS

**Waste Disposal:** Dispose of in accordance with all local, state and federal regulations.

### 14. TRANSPORT INFORMATION

**Land:** (DOT)- Not Regulated

**Inland Waterways:** (ADR)- N/A

**Sea:** (IMDG)- Not Regulated

**Air:** (IATA)- Not Regulated

### 15. REGULATORY INFORMATION

**Hazard and Safety Information:** PA Haz substance List- listed; WHMIS- listed, Classification B/3, D/1/B; IARC, NTP, OSHA- not listed as a carcinogen; SARA 313- listed; SARA 311,312- fire hazard, acute and chronic health hazard; TSCA-all components listed; EINECS- listed; R20/21/22- Harmful by inhalation, in contact with skin and if swallowed, R36/38- Irritating to eyes and skin, S36/37- Wear suitable protective clothing and gloves, S46- If swallowed seek medical advice immediately and show container/label (all for Ethylene Glycol Monobutyl Ether)

**Ozone Depleting Chemicals Present:** None

### 16. OTHER INFORMATION

Containers of this material may be hazardous when emptied, all hazard precautions given in the data sheet must be observed. The information contained herein is based upon what we believe to be reliable data. However, we make no warranty or guarantees, expressed or implied, concerning the accuracy of such information and disclaim all liability from reliance thereon. You should evaluate the information through your own sources prior to use.

Reference ISO 11014-1