

**MATERIAL SAFETY DATA SHEET**

TRI-FLEX BLACK INKS

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**PRODUCT NAME: TRI-FLEX BLACK INKS**  
PRODUCT CODE : 1170,1172,1173,170

**HMIS CODES: H F R P**  
1 1 0 C

===== **SECTION I - MANUFACTURER IDENTIFICATION** =====

MANUFACTURER'S NAME: Triangle Ink Co., Inc.  
ADDRESS : 53-57 Van Dyke Street  
Wallington, NJ 07057

EMERGENCY PHONE : 800-429-9300 (CHEMTREC)      DATE PRINTED : 09/16/2004  
INTRNATIONAL : 703-527-3887  
INFORMATION PHONE : 201-935-2777

===== **SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION** =====

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE MM HG @ TEMP	WEIGHT PERCENT
Mixture of 1,2-BENZENEDICARBOLIC ACID ESTERS	N/A	0.30000 356	15.0 – 40.0
Ethene, chloro-, homopolymer	9002-86-2	0.00000 0.00000	15.0 – 40.0
Calcium Carbonate ACGIH TLV: 10mg/M3 Silica, Quartz TLV 0.1 Mg/M (respirable dust)	1317-65-3	0.00000 0.00000	7.0 – 13.0
Bis(2-ethylhexyl) terephthalate OSHA PEL: NE, ACGIH TLV: NE, OTHER: NE	6422-86-2	1.00000 423.0000	3.0 – 7.0
Alkyl Benzyl Phthalate,BUTYL BENZYL PHTHALATE OSHA PEL: 5 mg/m3, ACGIH TLV: 5 mg/m3, OTHER: 5 ppm	85-68-7	0.16000 302.0000	5.0 – 10.0
Proprietary mix. Contains 30-40% Dinonyl Phthalate OSHA PEL: 5mg/m3, ACGIH TLV: 10mg/m3	MIXTURE	0.00000 0.00000	3.0 – 7.0
CARBON BLACK PIGMENT OSHA PEL: 3.5 mg/m3	1333-86-4	0.00000 0.00000	1.0 – 5.0

\*\*\* No toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372 are present. \*\*\*

WARNING: DETECTABLE AMOUNTS OF A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND/OR BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM MAY BE PRESENT IN THIS PRODUCT.

===== **SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS** =====

BOILING RANGE: 395 TO 440 DEG F      SPECIFIC GRAVITY (H2O=1): 1.18  
VAPOR DENSITY: HEAVIER THAN AIR      EVAPORATION RATE: SLOWER THAN ETHER  
MATERIAL V.O.C.: . lb/gl  
SOLUBILITY IN WATER: Non Soluble  
APPEARANCE AND ODOR: BLACK PASTE AND CHARACTERISTIC ODOR.

===== **SECTION IV - FIRE AND EXPLOSION HAZARD DATA** =====

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**FLASH POINT:** 248 deg F                   **METHOD USED:** PMCC  
**FLAMMABLE LIMITS IN AIR BY VOLUME-** LOWER: N/A           UPPER: N/A

**EXTINGUISHING MEDIA:** FOAM, CO2, DRY CHEMICAL

**SPECIAL FIREFIGHTING PROCEDURES**  
USE SELF CONTAINED BREATHING APPARATUS, AND SUITABLE PROTECTIVE CLOTHING.

**UNUSUAL FIRE AND EXPLOSION HAZARDS**  
MATERIAL WILL BURN, BUT WILL NOT IGNITE READILY. COOLING REQUIRED TO PREVENT EXPLOSION IN THE HEAT OF FIRE.

===== **SECTION V - REACTIVITY DATA** =====

**STABILITY:** STABLE

**CONDITIONS TO AVOID**  
HIGH TEMPERATURES.

**INCOMPATIBILITY (MATERIALS TO AVOID)**  
NONE KNOWN.

**HAZARDOUS DECOMPOSITION OR BYPRODUCTS**  
MAY YIELD CARBON DIOXIDE BY THERMAL DECOMPOSITION.

**HAZARDOUS POLYMERIZATION:** WILL NOT OCCUR

===== **SECTION VI - HEALTH HAZARD DATA** =====

**INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE**  
IF BREATHING DIFFICULTIES, DIZZINESS OR LIGHTHEADEDNESS OCCURS WHEN WORKING WITH HIGH VAPOR CONCENTRATION, VICTIM SHOULD SEEK FRESH AIR. IF BREATHING STOPS BEGIN ARTIFICIAL RESPIRATION AND SEEK MEDICAL ATTENTION.

**SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE**  
MAY CAUSE ITCHING OF SKIN AND TEARING OF EYES.

**SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE**  
THIS PRODUCT MAY CAUSE SKIN IRRITATION UPON PROLONGED OR REPEATED CONTACT.

**INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE**  
IF THIS PRODUCT IS SWALLOWED, INDUCE VOMITING, ONLY IF VICTIM IS ALERT. IMMEDIATELY SEEK MEDICAL ATTENTION. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONCIOUS PERSON.

**HEALTH HAZARDS (ACUTE AND CHRONIC)**  
Inhalation-Dizziness, breathing difficulty, headaches, and loss of coordination. Eye contact-Severe irritation, tearing, redness, and blurred vision. Skin contact-Can dry and defat skin causing cracks, irritation, and dermatitis. Ingestion-Can cause gastrointestinal irritation, vomiting, nausea, & diarrhea. No chronic health effects.

**CARCINOGENICITY:** NTP CARCINOGEN: No   **IARC MONOGRAPHS:** No   **OSHA REGULATED:**  
Yes

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE**  
ASTHMATIC AILMENTS, SKIN DISORDERS

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## **EMERGENCY AND FIRST AID PROCEDURES**

INHALATION: MOVE TO FRESH AIR. GET MEDICAL ATTENTION IF IRRITATION PERSISTS.

SKIN CONTACT: WASH WITH SOAP AND LARGE AMOUNT OF WATER.

EYE CONTACT: FLUSH WITH LARGE AMOUNT OF WATER UNTIL IRRITATION SUBSIDES. IF IRRITATION PERSISTS, SEEK MEDICAL HELP.

INGESTION: IF SWALLOWED, INDUCE VOMITING, BUT ONLY IF VICTIM IS ALERT. GET PROMPT MEDICAL ATTENTION. DO NOT ATTEMPT TO GIVE ANYTHING BY MOUTH TO A DROWSY OR UNCONCIOUS PERSON.

## ===== **SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE** =====

### **STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

MATERIAL SHOULD BE GATHERED BY SCOOPING INTO CONTAINERS. PREVENT FROM ENTERING SEWERS OR OTHER DRAINAGE.

### **WASTE DISPOSAL METHOD**

COLLECT ABSORBENT/SPILLED MATERIAL IN METAL CONTAINERS. PREFERRED DISPOSAL IS TO HARDEN BY HEATING TO 300°F BEFORE COMMITTING TO APPROVED LANDFILL. CONSULT LOCAL, STATE & FEDERAL HAZARDOUS WASTE DISPOSAL REGULATIONS.

### **PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING**

STORE IN COOL AREA TO PREVENT HARDENING.

### **OTHER PRECAUTIONS**

NONE.

## ===== **SECTION VIII - CONTROL MEASURES** =====

### **RESPIRATORY PROTECTION**

THE USE OF RESPIRATORY PROTECTION DEPENDS ON VAPOR CONCENTRATION. ABOVE THE TIME WEIGHTED TLV, USE NIOSH APPROVED CARTRIDGE RESPIRATOR OR GAS MASK.

### **VENTILATION**

GENERAL MECHANICAL VENTILATION SHOULD BE SUFFICIENT TO KEEP RELEASES WITHIN SPECIFIED TIME WEIGHTED TLV RANGE.

### **PROTECTIVE GLOVES**

THE USE OF IMPERMEABLE GLOVES IS ADVISED TO PREVENT SKIN IRRITATION.

### **EYE PROTECTION**

SAFETY GLASSES, CHEMICAL GOGGLES AND OR FACE SHIELDS ARE RECOMMENDED.

### **OTHER PROTECTIVE CLOTHING OR EQUIPMENT**

SKIN PROTECTIVE CLOTHING MUST BE WORN.

### **WORK/HYGIENIC PRACTICES**

EYE WASHES AND SAFETY SHOWERS IN THE WORKPLACE ARE RECOMMENDED.

## ===== **SECTION IX - DISCLAIMER** =====

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