

PANNIER CORPORATION
207 SANDUSKY STREET, PITTSBURGH, PA 15212-5823 U.S.A.

MATERIAL SAFETY DATA SHEET

#1001F ORANGE INK
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REV. 6 July 23, 2003

IMPORTANT: Read this MSDS before handling and disposing of this product and pass this information on to employees, customers and users of this product.

SECTION I - GENERAL INFORMATION

24 HOUR EMERGENCY TELEPHONE NUMBER: 800-424-9300

INTERNATIONAL EMERGENCY TELEPHONE NUMBER: 703-527-3887

TRADE NAME: PANNIER "MASTER MARKER"
GENERIC NAME: Flexographic Ink
CHEMICAL FAMILY: Mixture
CAS NO.: NOT AVAILABLE (MIXTURE)
DOT HAZARDOUS MATERIALS PROPER SHIPPING NAME: PRINTING INK
DOT HAZARD CLASS: Flammable Liquid
UN/NA ID NO.: UN 1210
HMIS CODES: 2H, 3F, 0R

SECTION II - HAZARDOUS COMPONENTS

	CAS NUMBER	OCCUPATIONAL EXPOSURE LIMITS		WEIGHT
		OSHA PEL	ACGIH TLV	PERCENT
Alcohols				20-40
Esters				20-40
Pigments				10-30
Resins				10-30
Isopropyl Alcohol		400	400	
Methoxy-2-Propanol		NE	100	
Ethanol		1000	1000	
*Ethyl Acetate	141-78-6	400	400	1.130
*Pigment Red 53:1 (Barium Component)	5160-02-1			4.334

SECTION III - PHYSICAL DATA

BOILING POINT: 165°F
SPECIFIC GRAVITY (H₂O=1): 1.0
VAPOR DENSITY: 1.0
MATERIAL V.O.C.: 8.3 LB/GL
SOLUBILITY IN WATER: Moderate
APPEARANCE AND ODOR: Colored Liquid, Alcohol Odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 55°F TCC
FLAMMABLE LIMITS IN AIR BY VOLUME: LOWER: 1.8% UPPER: 19%
EXTINGUISHING MEDIA: Foam, Carbon Dioxide, or Dry Chemical
SPECIAL FIREFIGHTING PROCEDURES: Use water fog to cool containers. Use self-contained breathing apparatus where appropriate to fight fire. Wear protective clothing. Fight fire from safe distance.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Material may explode at temperatures above 150°F. Vapors are heavier than air, may form explosive mixture with air, may travel and ignite or flash back. Explosion-proof equipment should be used. Material is a Class I, flammable liquid (flashpoint less than 100°F) as defined by the National Fire Protection Association (NFPA) criteria and sited in 29 CFR Section 1910.106 (19).

SECTION V - REACTIVITY DATA

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STABILITY: Stable
CONDITIONS TO AVOID: Extreme Heat, Sparks and Open Flames
INCOMPATIBILITY (MATERIALS TO AVOID): Contact with strong acids, alkalis or oxidizers.
HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Acrid smoke, oxides of carbon (carbon monoxide, carbon dioxide), oxides of nitrogen (nitrogen dioxide) may be released as byproducts of combustion.
HAZARDOUS POLYMERIZATION: Will not occur.

SECTION VI - HEALTH HAZARD DATA

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Causes headache, drowsiness, nausea and vomiting if inhaled.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE: SKIN: Contact may cause drying/cracking causing irritation. EYES: Contact will cause irritation.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Prolonged contact may affect the central nervous system characterized by dizziness, weakness, fatigue, nausea, headache, and possible unconsciousness or death.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: If swallowed, causes drunkenness, followed by severe systemic illness.

HEALTH HAZARDS (ACUTE AND CHRONIC): Liquid material in contact with eyes will cause irritation. Vapors may irritate eyes. Prolonged exposure to either liquid or vapors may damage liver.

CARCINOGENICITY: NTP? No IARC MONOGRAPHS? No OSHA REGULATED? No

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: At present, information is not known to manufacturer.

EMERGENCY AND FIRST AID PROCEDURES: EYES: Flush immediately with water for 15 minutes. See a physician. SKIN: Wash with soap and water. Remove contaminated clothing. Consult a physician. INGESTION: Consult a physician or poison control center immediately. Do NOT induce vomiting.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Absorb or contain with sand or an absorbent material and dispose in approved manner. Wear appropriate protective equipment which may include chemical resistant gloves, goggles or face shield, apron, and organic vapor respirator.

WASTE DISPOSAL METHOD: Dispose in accordance with federal, state and local regulations. Material may be compatible with industrial waste incineration or inclusion in a fuel blending program. This characterization is subject to approval by your waste management contractor.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Protect container from freezing. Overheating may cause container to rupture, thus covered storage is preferred. Containers should not be stacked more than two high. 55-gallon containers should be moved with appropriate material handling equipment.

OTHER PRECAUTIONS: Do not store or use near heat, sparks, or flame. Store and use only in well-ventilated areas. Do NOT reuse, flame-cut or weld empty containers. Do NOT ingest. Prevent prolonged or repeated breathing of vapor. Avoid skin and/or eye contact.

SECTION VIII - CONTROL MEASURES

VENTILATION: Provide adequate exhaust ventilation at the point of generation to maintain the employees' breathing zone air below the exposure limit listed in Section II.

PROTECTIVE GLOVES: Chemical resistant (Butyl, Neoprene, PVC) recommended particularly where skin contact is unavoidable (cleaning up a spill or washing the press).

EYE PROTECTION: Splashproof safety goggles.

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OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Typically, usual work clothes will suffice. No impervious protective suit (Tyvek for example) is necessary in order to use this material under normal operating conditions.

WORK/HYGIENIC PRACTICES: Wash hands thoroughly with soap and water before eating, drinking or smoking. Avoid smoking in work area.

SECTION IX - SPECIAL PRECAUTIONS

RESPIRATORY PROTECTION: If necessary, a MSHA/NIOSH approved respirator with cartridges capable of removing organic vapors (per table I-1 29 CFR 1910.134) should be used to protect workers. Typically, a negative pressure demand respirator (half-mask or full-face) will suffice in routine operations; however, they are NOT effective where the maximum use concentration (MUC) is exceeded for a particular cartridge-mask combination. Consult with your safety equipment supplier.

SECTION X - REGULATORY INFORMATION

TSCA CERTIFICATION

All chemicals contained in this product are listed on the TSCA inventory or exempt from listing.

LIST	SUBSTANCE DESCRIPTION	WEIGHT	CAS NUMBER
CERCLA	CERCLA Hazardous Substances Ethyl Acetate	1.130	141-78-6
TOXIC	SARA 313 Toxic Chemical Pigment Red 53:1 (Barium Compo)	4.334	5160-02-1
PROP65	California Proposition 65 Listed Pigment Red 53:1 (Barium Compo)	4.334	5160-02-1
SPCL HAZ	Special Hazard Information Pigment Red 53:1 (Barium Compo)	4.334	51690-02-1

Pigment Red 43:1 is registered as a Drug and Cosmetic Colorant (D&C Red 9). Due to this usage classification, extensive toxicity studies have been conducted. This pigment exhibits very low acute toxicity, however, one chronic feeding study resulted in slight tumorigenic activity in male rats. Other similar studies have not reproduced this finding. Due to the single positive study, this pigment is approved for external use only as a D&C Colorant which allows for use in cosmetic applications such as lipstick and nail polish. Chronic ingestion is the only exposure that might pose a potential risk. This type of exposure is highly unlikely with a printing ink and virtually impossible after the ink has been applied to a substrate that is not expected to have any significant oral contact.

DISCLAIMER OF LIABILITY

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