PANNIER CORPORATION

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MATERIAL SAFETY DATA SHEET

#47 INK PAGE 1 OF 2

WEIGHT

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

PRODUCT DESCRIPTION: #47 INK PREPARATION DATE: 06/01/03 - Rev. 5

Colors: White, Yellow

SECTION I - GENERAL INFORMATION

24 HOUR EMERGENCY TELEPHONE NUMBER: INFOTRAC 1-800-535-5053

TRADE NAME: PANNIER GENERIC NAME: Flexographic Ink

CHEMICAL FAMILY: Mixture

CAS NO.: NOT AVAILABLE (MIXTURE)

DOT HAZARDOUS MATERIALS PROPER SHIPPING NAME: Non-Restricted Article

DOT HAZARD CLASS: Non-Restricted Not Applicable HMIS CODES: Not Applicable 1H, 2F, 0R

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	CAS NO.	TLV	CARCINOGEN	PERCENT
Diethylene Glycol mono Butyl Ether	112-34-5	Not Established	No	9-21
Dibasic Ester				30-40
Consists of:				
Dimethyl Glutarate	1119-40-0	Not Established	No	55-75
Dimethyl Adipate	627-93-0	Not Established	No	10-25
Dimethyl Succinate	106-65-0	Not Established	No	19-26

SECTION III - PHYSICAL DATA

BOILING POINT: >93 °C (200 °F)

SPECIFIC GRAVITY (H₂0=1): >1
VAPOR DENSITY: N/A
EVAPORATION RATE (Butyl Acetate): <1.0
MATERIAL V.O.C.: 721-776 G/L
SOLUBILITY IN WATER: Miscible

APPEARANCE AND ODOR: Colored Fluid, Mild and Characteristic Odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 83 °C (182 °F)

EXTINGUISHING MEDIA: Water spray, dry chemical, carbon dioxide, or alcohol foam

SPECIAL FIREFIGHTING PROCEDURES: Use self-contained breathing apparatus and protective clothing. Fight fire from safe

distance.

UNUSUAL FIRE AND EXPLOSION HAZARDS: May form peroxides of unknown stability.

SECTION V - REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: Extreme Heat, Sparks and Open Flames

INCOMPATIBILITY (MATERIALS TO AVOID): Contact with strong acids, strong oxidizing agents.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Acrid smoke, oxides of carbon (carbon monoxide, carbon dioxide).

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION VI - HEALTH HAZARD DATA

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Irritation of the upper respiratory tract.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE: SKIN: Direct contact may cause irritation or rash. EYES: Causes immediate stinging and pain with severe excess redness and swilling of the conjunctiva, with chemical burns of the cornea.

PANNIER CORPORATION MATERIAL SAFETY DATA SHEET

#47 INK PAGE 2 of 2 06/01/03 Rev.5

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Prolonged contact may cause dermatitis.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Expected to be a low ingestion hazard.

HEALTH HAZARDS (ACUTE AND CHRONIC): Liquid material in contact with eves will cause irritation. Vapors may irritate eves.

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: Flush skin with water after contact. Remove contaminated clothing immediately. Wash contaminated clothing before reuse. Consult a physician if irritation persists. INGESTION: Do NOT induce vomiting. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Consult a physician or poison control center immediately.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Small spills should be flushed with large quantities of water. Larger pills should be collected for disposal. Wear appropriate protective equipment that may include chemical resistant gloves, goggles or face shield, apron, and organic vapor respirator.

WASTE DISPOSAL METHOD: Dispose in accordance with local, state and federal 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.

OTHER PRECAUTIONS: Eliminate all ignition sources. Do not store or use near heat, sparks, or flame. Store and use only in well ventilated areas. Do not re-use, 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

Good general ventilation (typically 10 air changes/hr) should be sued. Use local exhaust ventilation or other engineering controls to maintain airborne levels below recommended exposure limits. If engineering controls do not maintain concentrations below recommended exposure limits, an approved respirator must be worn. Type: organic vapor.

PROTECTIVE GLOVES: Chemical resistant gloves: neoprene.

EYE PROTECTION: Splashproof safety goggles.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Typically, usual work clothes will suffice. It is a good industrial practice to minimize skin contact.

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

SECTION IX – TOXICOLOGICAL INFORMATION

ACUTE TOXICITY: Oral LD50 (rat) - 7292 mg/kg; Oral LD50 (mouse) - 2406 mg/kg; Dermal LD50 (rabbit) - 2764 mg/kg; Skin irritation (rabbit) - slight; Eye irritation (rabbit) - moderate (for Diethylene glycol mono butyl ether); Oral LD-50 (rat) - 8,191 mg/kg (for DBE)

CHRONIC TOXICITY: Mild to severe skin irritant and a moderate eye irritant. Repeated inhalation - toxicity includes decreased weight gain, absolute and relative liver weight decrease and degeneration of the olfactory epithelium. No genetic damage in animals. No developmental or reproductive effects in lab animals (for Dibasic Ester).

SENSITIZATION: No **SPECIAL EFFECTS:** Based on animal studies, some symptoms of pre-existing cvc disease could be aggravated by overexposure.

SECTION X - REGULATORY INFORMATION

Hazard and Safety Information: WHMIS – Diethylene glycol mono butyl ether – D/2/B, Dibasic ester – D/2/B;

SARA 311,312 - acute health hazard

SARA 313 - Diethylene glycol monobutyl ether - listed

TSCA - Diethylene glycol mono butyl ether, Dibasic ester - listed;

EINECS; Diethylene glycol mono butyl ether - #203-961-6; Dimethyl Glutarate - #214-277-2, Dimethyl Adipate - #211-020-6, Dimethyl Succinate - #203-419-9

Ozone Depleting Chemicals Present: None

DISCLAIMER OF LIABILITY

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