

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

MATERIAL SAFETY DATA SHEET

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

CHEMTREC 24-HOUR EMERGENCY TELEPHONE NUMBER: 800-424-9300
INTERNATIONAL EMERGENCY TELEPHONE NUMBER: 703-527-3887

PRODUCT DESCRIPTION: GRADE A SOLVENT **PREPARATION DATE:** 12-22-05- Rev. 10

SECTION I - GENERAL INFORMATION

TRADE NAME: PANNIER "MASTER MARKER"
GENERIC NAME: Flexographic Ink Solvent
CHEMICAL FAMILY: Alcohol
CAS NO.: NOT AVAILABLE (MIXTURE)
DOT HAZARDOUS MATERIALS PROPER SHIPPING NAME: Flammable Liquid, N.O.S.
DOT HAZARD CLASS: Flammable Liquid
UN/NA ID NO.: UN 1993
HMIS CODES: 2H, 3F, 0R

SECTION II - HAZARDOUS INGREDIENTS

INGREDIENT NAME	CAS NUMBER	VOLUME %	TLV (units)
Ethanol	64-17-5	92	1000ppm
Methanol	67-56-1	<4	200ppm
Methyl Isobutyl Ketone	108-10-1	<2	50ppm
Ethyl Acetate	141-78-6	<1	400ppm
Hexane	110-54-3	<1	400ppm
Pine Oil	8002-09-3	<1	100ppm
Basic Yellow 2	2465-27-2	<1	

SECTION III - PHYSICAL DATA

BOILING POINT, 760 MM Hg: 77°C (171°F)
FREEZING POINT: <-90°C (<-130°F)
SPECIFIC GRAVITY (H₂O=1) 0.79
VAPOR PRESSURE AT 20°C: 48.4 MM Hg @ 20/20°C
VAPOR DENSITY (AIR=1): 1.6
PERCENT VOLATIVE BY VOLUME: 100%
SOLUBILITY IN WATER BY WT: 100%
EVAPORATION RATE (Butyl Acetate=1): 3.6
APPEARANCE AND ODOR: Yellow Liquid; Characteristic Odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 57°F (14°C) Tag Closed Cup, 55°F (13°C)
FLAMMABLE LIMITS: % VOLUME IN AIR: LOWER: 3.3% UPPER: 19.0%
EXTINGUISHING MEDIA: Use water spray, carbon dioxide, dry chemical, or alcohol-type foam by manufacturer's recommended techniques.
SPECIAL FIRE FIGHTING PROCEDURES: Use self-contained breathing apparatus and protective clothing.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors form from this product and may travel or be moved by air currents and ignited by pilot lights or other ignition sources.

SECTION V - REACTIVITY DATA

STABILITY: Stable

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CONDITIONS TO AVOID: NONE
HAZARDOUS POLYMERIZATION: Will not occur.
INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers, strong inorganic acids.

SECTION VI - HEALTH HAZARD DATA
EFFECTS OF ACUTE OVEREXPOSURE

EYE CONTACT: Liquid may cause discomfort with slight excess redness and possible swelling of the conjunctiva; corneal injury may occur.

SKIN CONTACT: Frequent or prolonged contact may cause discomfort and local redness.

INGESTION: May cause nausea abdominal pain, vomiting, headache, dizziness, shortness of breath, weakness, fatigue, leg cramps, confusion, restlessness, visual disturbances, drunken behavior, drowsiness, coma, and death. (THERE MAY BE A DELAY OF SEVERAL HOURS BETWEEN SWALLOWING METHANOL AND THE ONSET OF SIGNS OF ANY SYMPTOMS).

Visual effects include blurred vision, diplopia, changes in color perception, restriction of visual fields, and complete blindness.

Ingestion of moderate quantities of methanol also produces metabolic acidosis; onset of symptoms may be delayed up to 48 hrs.

** 60-200 ml of METHANOL is a fatal dose for most adults. Ingestion of as little as 10 ml has caused blindness.

With massive overdoses, liver, kidney and heart muscle injuries have been described.

Long-term repeated overexposure to methanol vapor concentrations of 3000ppm or greater may allow a cumulative effect to occur w/resulting nausea, vomiting, headache, ringing in the ears, insomnia, trembling, unsteady gait, vertigo, clouded double vision.

Liver and kidney damage may occur, especially when overexposed to ethanol, which may cause liver injury with fibrosis.

Due to its defatting properties, methanol may aggravate an existing skin condition, e.g. exzema; methanol may also aggravate existing liver and kidney diseases.

OTHER HEALTH HAZARDS: Repeated ingestion of ethanol by pregnant mothers has been shown to adversely affect the central nervous system of the fetus, producing a collection of effects which together constitute the fetal alcohol syndrome. These include mental and physical retardation, disturbances of learning, motor and language deficiencies, behavioral disorders, and small size head.

EMERGENCY FIRST AID PROCEDURES

EYES: Immediately flush eyes with water and continue washing for several minutes. If irritation persists, seek medical attention.

SKIN CONTACT: Immediately flush with large amounts of water; use soap if available. Remove contaminated clothing, including shoes, after flushing has begun.

INHALATION: Using proper respiratory protection, immediately remove the affected victim to fresh air. Administer artificial respiration if breathing has stopped. Keep at rest. Call for prompt medical attention.

INGESTION: If swallowed, induce vomiting. Keep at rest. Get prompt medical attention. Small amounts which accidentally enter the mouth should be rinsed until taste is gone.

SECTION VII – SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Contain spill; provide adequate ventilation; keep people away. Extinguish and do NOT turn on any ignition source until area is determined to be free from explosion or fire hazards. Keep material out of public waters; use dry absorbent on small spills.

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WASTE DISPOSAL METHOD: Dispose of according to all federal, state and local regulations.

SECTION VIII – SPECIAL PROTECTIVE INFORMATION

RESPIRATORY PROTECTION: NIOSH approved organic vapor cartridge.

VENTILATION: Local Exhaust: preferred; Mechanical (general): acceptable; Other: N/A

PROTECTIVE GLOVES: Rubber or neoprene

EYE PROTECTION: Safety glasses or goggles.

OTHER PROTECTIVE EQUIPMENT: Rubber apron and boots; eye bath, safety shower.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: DANGER! May cause eye damage and blindness if swallowed.

FLAMMABLE

Harmful if inhaled.

Harmful if absorbed through skin

Causes eye irritation

May cause drowsiness, dizziness

May cause heart muscle damage

May cause liver and kidney damage

DO NOT SWALLOW

Keep away from heat, sparks, flame

Avoid breathing vapor

Do Not get on skin, on clothing

Avoid contact with eyes

Keep container closed

Use with adequate ventilation

Wash thoroughly after handling

OTHER PRECAUTIONS:

Flammable Liquid: Clean equipment thoroughly prior to maintenance and/or repair.

Process Hazard: Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. ANY USE OF THIS PRODUCT IN ELEVATED-TEMPERATURE PROCESSES SHOULD BE THOROUGHLY EVALUATED TO ESTABLISH AND MAINTAIN SAFE OPERATING CONDITIONS.

Transfer Hazard: Vapors of this product may be ignited by static sparks.

SECTION X - REGULATORY INFORMATION

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III TOXIC CHEMICAL(S)

SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III AND OF 40 CFR 372.

CHEMICAL	CAS NUMBER	CONCENTRATION % PER GALLON
Methanol	67-56-1	<4
Methyl Isobutyl Ketone	108-10-1	<2
Ethyl Acetate	141-78-6	<2

DISCLAIMER OF LIABILITY

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