

**SECTION 1 - CHEMICAL PRODUCT AND COMPANY INFORMATION**

PRODUCT NAME: #1081 Ink: Various Colors
#1083 Ink: Various Colors

PRODUCT USE: VLY Flat Vinyl Series Solvent Evaporative Screen Ink

CAS NO.: N/A Mixture

DOT HAZARD CLASS: Printing Ink

UN/NA ID NO.: UN 1210

HMIS CODES: 2H,, 2F, 0R
Not recommended for: Consumer Use

Manufacturer/Supplier:
PANNIER CORPORATION
207 SANDUSKY STREET
PITTSBURGH, PA 15212-5823 U.S.A.
24 Hr Emergency Telephone Number: Infotrac 1-800-535-5053

SECTION 2 - HAZARDS IDENTIFICATION**Classification of the substance or mixture**

OSHA Regulatory Status This Product is Hazardous under the OSHA Hazard Communication Standard. **Physical hazards**

Health hazards Skin Irritant t. 2 - H315 Eye Irritant. 2A - H319

Warning

H227 Combustible liquid.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

sparks, open flames and hot surfaces. No smoking.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

H302+H312 Harmful if swallowed or in contact with skin.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P403+P235 Store in a well-ventilated place. Keep cool.

Signal word Danger



Skin Absorption may contribute to the overall absorption of this material.

Appropriate measures should be taken to prevent absorption so that the TLV and/or PEL are not invalidated.

*Inks containing Lead Chromate: Yellows, Oranges, Reds, Greens, Turquoise Blue

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

| HAZARDOUS COMPONENTS | CAS NUMBER | OCCUPATIONAL EXPOSURE LIMITS | | VAPOR PRESSURE MM HG @ 20°C | WEIGHT PERCENT |
|---------------------------------------|------------|------------------------------|-----------|--------------------------------|-------------------------------------|
| | | OSHA PEL | ACGIH TLV | | |
| Ethylene Glycol Monobutyl Ether | 111-76-2 | 503 PPM | 20 PPM | 1 | 10-20 |
| Cyclohexanone | 108-94-1 | 50 PPM | 203 PPM | 3.4 | 15-20 |
| Propylene Glycol Methyl Ether Acetate | 108-65-6 | None Established | 505 PPM | 3.7 | 15-30 |
| Aromatic Hydrocarbon | 64742-94-5 | None Established | 1002 PPM | <3.0 @ 25°C | <2 |
| Lead Chromate* | 7758-97-6 | | | n/a | as Cr 0.012 mg/m as Pb 0.05 mg/m |

SECTION 4 - FIRST AID MEASURES

EYES: Flush with copious amounts of water for at least fifteen minutes. Consult physician for medical treatment if necessary. **SKIN:** Remove contaminated clothing. Wash thoroughly with mild soap and warm water. Consult a physician if there is any persisting irritation. directed at control of the symptoms and the clinical condition.

HEALTH HAZARDS: Inks containing lead chromate: Lead chromate is suspected to cause lung cancer and is listed by the National Toxicology Program (NTP) and the International Agency for Research on Cancer (IARC.)

CARCINOGENICITY: Lead Chromate **NTP?** Yes **IARC** Yes **OSHA REGULATED?** No

HEALTH EFFECTS OF OVEREXPOSURE TO LEAD: Prolonged or repeated inhalation and ingestion, such as from poor hygiene, housekeeping or handling practices, can result in lead poisoning.

ACUTE EFFECTS: May cause acute encephalopathy that develops quickly to seizures, coma, and death from cardio respiratory arrest.

CHRONIC EFFECTS: Can cause loss of appetite, metallic taste in the mouth. Anxiety, constipation, nausea, pallor, excessive tiredness, weakness, insomnia, headache, nervous irritability, muscle and joint pain or soreness. Fine tremors, numbness, dizziness, hyperactivity and colic. Lead colic may cause severe abdominal pain, overexposure can also cause damage to the central nervous system and the brain (encephalopathy), kidney disease, reproductive toxicity in both men and women, blood forming system disorders and ultimately anemia. Reference 20 CRF 1910.1025 for more information on lead exposure.

ADDITIONAL HEATH HAZARDS: Reports have associated prolonged and repeated occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: 111°F

METHOD USED: Closed Cup

FLAMMABLE LIMITS IN AIR BY VOLUME: LOWER: 0.8% UPPER: 13.1%

EXTINGUISHING MEDIA:

"Class B" Fire Extinguishers used in accordance with manufacturers instructions.

"Alcohol" Foam, CO₂, Dry Chemical. Fog

SPECIAL FIREFIGHTING PROCEDURES: Full Protective equipment is recommended to protect fire fighters from any hazardous decomposition products. Water may be unsuitable for use on burning liquids. If water must be used, fog nozzles are highly preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition. Explosion or rupture when exposed to extreme heat. **UNUSUAL FIRE AND EXPLOSION HAZARDS:** Keep containers tightly closed. Isolate from heat, sparks, electrical equipment and open flame. Closed containers may explode if exposed to extreme heat. Application to hot surfaces requires special precautions. During emergency conditions, overexposure to decomposition products may constitute a health hazard. Systems may not be immediately apparent. Obtain medical attention.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Using non- sparking tools, place leaking containers in a well ventilated area, avoid breathing vapors, eliminate all sources of heat, sparks, or ignition. Notify proper authorities if public waters or sewers are contaminated.

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

SECTION 7 - HANDLING AND STORAGE

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 wellventilated 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 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

RESPIRATORY PROTECTION: Where concentrations in air may exceed the limits given in section ii and engineering, work practice or other means of exposure reduction are not adequate, NIOSH/MSHA approved respirators may be necessary to prevent overexposure.

VENTILATION: Local exhaust recommended when appropriate to control exposure to mist or aerosols. General exhaust is normally adequate to minimize exposure to vapors.

PROTECTIVE GLOVES: . Rubber or neoprene to minimize skin contact.

EYE PROTECTION: Safety goggles or full face shield.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Impermeable aprons and boots, safety shower and eye bath should be made available.

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

SPECIAL PRECAUTIONS: Special handling instructions for inks containing lead chromate:

Occupational exposure to lead chromate in our products is unlikely, however, sanding, blasting, or abrading of the dried coating can Generate harmful dust or particles if inhaled. It is recommended that you wear a properly fitted respirator

(NIOSH/MSHA approved) while performing any of the above functions. REFERENCE 29 CFR 1910.1025 FOR MORE INFORMATION ON LEAD EXPOSURE.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE: 302-350°F

VAPOR DENSITY: Heavier than air

DENSITY: 8.5-11.5 LB./GAL.

EVAPORATION RATE: Slower than Diethyl Ether

MATERIAL V.O.C.: 50-70% by weight or 500-700 grams/liter

APPEARANCE AND ODOR: Mobile Liquid. Various Colors. Ether-Like Odor

SECTION 10 - STABILITY AND REACTIVITY

Reactivity There are no known reactivity hazards associated with this product.

Stability Stable at normal ambient temperatures and when used as recommended.

Possibility of hazardous reactions Strong oxidizing agents.

Conditions to avoid Heat, sparks, flames.

Materials to avoid Strong oxidizing agents.

Hazardous decomposition products Carbon dioxide (CO₂). Carbon monoxide (CO).

SECTION 11 - TOXICOLOGICAL INFORMATION

Toxicological effects

Acute toxicity - oral Data based on literature. Product not tested.

ATE oral (mg/kg)

Acute toxicity - dermal 892.86

ATE dermal (mg/kg) 1,964.29

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 94.02

Specific target organ toxicity - single exposure

Target organs Eyes Gastro-intestinal tract Respiratory system, lungs Skin

Specific target organ toxicity - repeated exposure

Target organs Central nervous system Gastro-intestinal tract Reproductive organs Respiratory system, lungs

Aspiration hazard Not relevant.

Cyclohexanone

ATE oral (mg/kg)

Acute toxicity - dermal 500.0

ATE dermal (mg/kg)

Acute toxicity - inhalation 1,100.0

ATE inhalation (vapours mg/l)

Carcinogenicity 11.0

IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity

Toxicity Data based on literature. Product not tested.

Acute toxicity - aquatic EC₅₀, 24 hours: 820 mg/l, Daphnia magna invertebrates

Ecological information on ingredients.

Cyclohexanone

Biodegradation - 90 - 100:

Bioaccumulative potential
 Partition coefficient log Pow: 0.81

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste treatment methods

General information Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

Disposal methods Dispose of contents/container in accordance with national regulations. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste **Disposal Authority**. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions. When handling waste, the safety precautions applying to handling of the product should be considered.

SECTION 14 - TRANSPORT INFORMATION

UN Number

UN No. (DOT) 1210

UN No. (IMDG) 1210

UN No. (ICAO)

UN proper shipping name 1210

Proper shipping name (DOT) PRINTING INK

Proper shipping name (IMDG) PRINTING INK

Proper shipping name (ICAO) PRINTING INK

Transport hazard class(es)

IMDG Class 3

IMDG packing group III

ICAO class/division 3

Transport labels



Packing group

DOT pack group III

SECTION 15 - REGULATORY INFORMATION

Toxic substances control act (tsca) status: the ingredients of this product are Listed on the tsca inventory.

This product contains a toxic chemical or chemicals subject to the annual Reporting requirements of section 313 of title III of the superfund amendments And reauthorization act of 1986 and 40 cfr part 372.

Contains: ethylene glycol monobutyl ether

Case# 111-76-2

20% maximum by weight

Inks containing lead chromate:

Lead compounds: 27.5% maximum by weight.

(lead content: 17.9% maximum by weight)

Chromium compounds: 27.5% maximum by weight.

(chromium content: 4.1% maximum by weight)

This notification must not be detached from the material safety data sheet (msds) and any copying and redistribution of the msds shall include copying and Redistribution of the notice attached to copies of the msds subsequently redistributed. State of California safe drinking water and toxic enforcement act of 1986 (proposition 65): this product contains crystalline silica, a chemical known to The state of California to cause cancer.

State of California safe drinking water and toxic enforcement act of 1986 (proposition 65): this product may contain trace amounts of naphthalene, a Chemical known to the state of California to cause cancer.

State of California safe drinking water and toxic enforcement act of 1986 (proposition 65): this product may contain trace amounts of toluene, a chemical Known to the state of California to cause reproductive toxicity.

For products containing lead chromate pigments: lead is known to the state of California to cause cancer and reproductive toxicity.

Chromium (hexavalent compounds) is known to the state of California To cause cancer.

Regulatory Status Hazardous Chemical

Regulatory References OSHA Hazard Communication Standard, 29 CFR 1910.1200

US Federal Regulations

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

Cyclohexanone

Final CERCLA RQ: 5000(2270) pounds (Kilograms)

SARA (311/312) Hazard Categories

California Directors List of Hazardous Substances The following ingredients are listed or exempt:

Cyclohexanone

Massachusetts "Right To Know" List

The following ingredients are listed or exempt:

Cyclohexanone

Rhode Island "Right To Know" List

The following ingredients are listed or exempt:

Cyclohexanone

Minnesota "Right To Know" List

The following ingredients are listed or exempt:

Cyclohexanone

New Jersey "Right To Know" List

The following ingredients are listed or exempt:

Cyclohexanone

Pennsylvania "Right To Know" List

The following ingredients are listed or exempt

Cyclohexanone

Inventories

EU - EINECS/ELINCS

All the ingredients are listed or exempt.

Canada - DSL/NDSL

All the ingredients are listed or exempt.

US - TSCA

All the ingredients are listed or exempt.

Australia - AICS

The following ingredients are listed or exempt:

Cyclohexanone

Japan - MITI

The following ingredients are listed or exempt:

Cyclohexanone Korea - KECI

The following ingredients are listed or exempt:

Cyclohexanone

China - IECSC

The following ingredients are listed or exempt:

Cyclohexanone

Philippines - PICCS

The following ingredients are listed or exempt:

Cyclohexanone

SECTION 16 - OTHER INFORMATION

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