

**1. PRODUCT IDENTIFICATION**

**PRODUCT NAME:** #514 UV Non-Porous Ink  
**PRODUCT USE:** Coding and Marking  
**PANNIER P/N:** IU514-UV4K  
**PRODUCT COLOR:** Invisible

**Manufacturer/Supplier:**  
 PANNIER CORPORATION  
 207 SANDUSKY STREET  
 PITTSBURGH, PA 15212-5823 U.S.A.

**24 Hr Emergency Telephone Number: INFOTRAC 1-800-535-5053**

**2. HAZARDS IDENTIFICATION**

**Classification:**

Flammable Liquids	Category 3
Acute toxicity, Oral	Category 5
Acute toxicity, Inhalation	Category 4
Skin corrosion/Irritation	Category 3
Serious Eye Damage/eye irritation	Category 1
Reproductive toxicity	Category 1B
Skin Sensitization	Category 1
Aspiration hazard	Category 1
Specific target organ toxicity (single exposure)	Category 3

**Labeling: Symbols:**



**Signal Word:** Danger  
**Hazard statements:**  
 H226 Flammable liquid and vapor  
 H303 May be harmful if swallowed  
 H316 Causes mild skin irritation  
 H318 Causes serious eye damage  
 H332 Harmful if inhaled  
 H336 May cause drowsiness or dizziness  
 H360 May damage fertility or the unborn child

**Precautionary statements:**

P201 Obtain special instruction before use  
 P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
 P261 Avoid breathing dust/fume/gas/mist/vapors/spray  
 P280 Wear protective gloves/protective clothing/eye protection/face protection  
 P305+351+338 if in eyes: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing.  
 P308+P313 If exposed or concerned. Get medical advice/attention  
 P501 Dispose of contents/container to an approved waste disposal plant.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Chemical Name	CAS #	Wt. %
Methoxy-2-propanol	107-98-2	15-30
4-Hydroxy-4-methyl-2-pentanone	123-42-2	15-30
2-propanol	67-63-0	15-30

Ethyl Alcohol  
2-(2-Ethoxyethoxy)ethanol

64-17-5  
111-90-0

5-15  
5-15

#### 4. FIRST AID MEASURES

**Ingestion:** if swallowed, do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

**Eye contact:** rinse thoroughly with plenty of water for at least 15 minutes and consulting position

**Skin contact:** wash off with soap and plumbing of water. Consult a physician

**Inhalation:** if three thin, move person into fresh air. If not breathing, if artificial respiration. Consult a physician

**most important symptoms and effects**

**Symptoms** causes eye damage. May be harmful if absorbed through skin. Harmful if inhaled. Causes respiratory tract irritation. Papers may cause drowsiness and dizziness. May be harmful if swallowed

**Indication of any immediate medical attention and special treatment needed**

**Notes to physician** treat symptomatically

#### 5. FIREFIGHTING MEASURES

**Suitable extinguishing media:** water fog, multipurpose foam, dry chemical, CO2

**Specific hazards in case of fire** fight as volatile liquid fire vapors are dense and may travel to remote ignition source

**Hazardous composition products** carbon oxides nitrogen oxides organic combustion products which may be toxic and/or irritating

**Protective equipment and precautions for firefighters:**

as in any fire, where self-contained breathing apparatus pressure demand. MSHA/N OSH (as approved or equivalent) and full protective gear

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** where chemical goggles, gloves, boots and protective clothing. Wear respirator if necessary. Avoid breathing vapors, missed or gas. Ensure adequate ventilation. Remove all sources of ignition and heat.

**Environmental precautions:** prevent additional discharge of material. Prevent material from entering sewers or water courses

**Methods and materials for containment and cleaning up:** absorb small spills with San, filter grade, vermiculite or other inert absorb material. In place and they chemical waste container. For large spills. Contain with Sand or earth dikes. Dispose of waste in accordance with applicable government regulations.

#### 7. HANDLING AND STORAGE

**Precautions for safe handling:**

Avoid contact with eyes. Wash face, hands, and any other exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing and eye/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Unscrew SLOWLY. Do not unscrew entirely until all pressure has been completely released area keep away from heat/sparks/open flames/hot surfaces. Empty containers may contain residues. Precautions apply to empty containers.

**Conditions for safe storage:**

Keep container tightly closed and store in a cool, dry and well ventilated place. Keep storage temperature between 4 – 32° C (40 – 90° F). Incompatible with strong oxidizing agents, strong acids, strong bases, alkali metals and halogens.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Exposure guidelines:**

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDHL
1-Methoxy-2-propanol 107-98-2	TWA 100 ppm STEL 150 ppm	TWA 100 ppm TWA 360 mg/m <sup>3</sup> STEL 150 ppm STEL 540 mg/m <sup>3</sup>	TWA 100 ppm TWA 360 mg/m <sup>3</sup> STEL 150 ppm STEL 540 mg/m <sup>3</sup>
2-Hydroxy-4-methyl-2-pentanone 123-42-2	TWA 50 ppm	TWA 50 ppm TWA 240 mg/m <sup>3</sup>	IDLH 1800 ppm TWA 50 ppm TWA 240 mg/m <sup>3</sup>
2-Propanol 67-63-0	TWA 200 ppm	TWA 400 ppm TWA 980 mg/m <sup>3</sup> STEL 500 ppm STEL 1225 mg/m <sup>3</sup>	IDLH 2000 ppm TWA 400 ppm TWA 980 mg/m <sup>3</sup> STEL 500 ppm STEL 1225 mg/m <sup>3</sup>
Ethyl Alcohol 64-17-5	TWA 1000 ppm	TWA 1000 ppm TWA 1900 mg/m <sup>3</sup>	IDLH 3300 ppm TWA 1000 ppm TWA 1900 mg/m <sup>3</sup>
2(2-Ethoxythoxy)ethanol 111-90-0	Not Established	Not Established	IDLH ppm TWA ppm TWA mg/m <sup>3</sup> STEL ppm STEL mg/m <sup>3</sup>

**Appropriate engineering controls**

Apply technical measures to comply with the occupational exposure limits. Local exhaust and mechanical ventilation's are recommended to be used as engineering controls

**Individual protection measures, such as personal protective equipment:**

**Eye/face protection:** safety glasses with side shields or chemical goggles must be worn

**Skin/body protection:** wear protective gloves. Wear suitable protective clothing and footwear appropriate for the risk of exposure

**Respiratory protection:** if exposure limits are exceeded or irritation is experienced. NIOSH?MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

**General hygiene:** handle in accordance with good industrial hygiene and safety practice.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	liquid
Odor:	low
Odor Threshold:	Not determined
pH:	Not determined
Boiling point:	Not determined
Melting/Freezing point:	Not determined
Flash Point 32 C,	23.3° C/74° F
Evaporation rate (n-Butyl acetate = 1):	<1
Flammability (solid, gas):	Not determined
Upper/Lower flammable limit	Not determined
Vapor pressure	Not determined
Vapor density (Air = 1):	>1
Specific gravity (water =1)	0.96

<b>Water solubility:</b>	Complete
<b>Solubility and other solvents:</b>	Not determined
<b>Partition coefficient:</b>	Not determined
<b>Auto-ignition temperature:</b>	Not determined
<b>Decomposition temperature:</b>	Not determined
<b>Viscosity:</b>	Not determined
<b>VOC content (%):</b>	95%
<b>VOC content:</b>	7.6 pounds/gallon

## 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	Not reactive under normal conditions
<b>Chemical stability:</b>	Stable under the recommended storage conditions
<b>Possibility of hazardous reactions:</b>	None under normal processing.
<b>Conditions to avoid:</b>	keep out of reach of children. Keep away from heat, sparks and open flame. Keep away from contact with incompatible materials.
<b>Incompatible materials:</b>	strong oxidizing agents
<b>Hazardous decomposition products:</b>	carbon oxides, nitrogen oxides. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

## 11. TOXICOLOGICAL INFORMATION

### Information unlikely routes of exposure

<b>Eye contact:</b>	Causes eye irritation
<b>Skin contact:</b>	May be harmful if absorbed through skin. Causes skin irritation
<b>Inhalation:</b>	May be harmful if inhaled. Causes respiratory irritation. May cause drowsiness or dizziness.
<b>Ingestion:</b>	May be harmful if swallowed

### Component information:

Chemical name and CAS#	Oral LD50	Dermal LD50	Inhalation LC50
1-Methoxy-2-propanol 107-98-2	= 11,700 mg/kg (mouse)	= 13,000 mg/kg (rabbit)	= 10,000 mg.m <sup>3</sup> (rat) 5h
2-Hydroxy-4-methyl-2-pentanone 123-42-2	= 2,520 mg/kg (rat)	= 13,500 mg/kg (rabbit)	= 1,500 ppm (rat) 5h
2-Propanol 67-63-0	= 5,045 mg/kg (rat)	= 12,800 mg/kg (rabbit)	= 16,000 mg.m <sup>3</sup> (rat) 5h
Ethyl Alcohol 64-17-5	= 7,060 mg/kg (rat)	No Data	= 20,000 mg.m <sup>3</sup> (rat) 5h
2(2-Ethoxythoxy)ethanol 111-90-0	= 10,502 mg/kg (rat)	= 9,143 mg/kg (rabbit)	> 200 mg/l (rat) 5h

### Information on physical, chemical and toxicological effects:

**Symptoms** please see section 4 of this SDS for symptoms

### Carcinogenicity:

**2-Propanol 67-63-0** Group 3 (IARC)

### IRAC (International Agency for Research on Cancer)

Group 1 - carcinogenic to humans  
 Group 2B - limited evidence carcinogenity  
 Group 3 - IARC components are "not classified as human carcinogens"

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity:

#### Component information

Chemical Name and CAS#	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
1-Methoxy-2-propanol 107-98-2		LC50 - Pimephales promelas - 20,800 mg/l - 96 h	I	EC50 - Daphnia magna - 23,300 mg.l - 48 h
2-Hydroxy-4-methyl-2-pentanone		LC50 - Lepomis		EC50 - Daphnia

123-42-2		macrochirus - 420 mg/lo 96 h		magna - 9,000 mg.l - 24 h
2-Propanol 67-63-0	EC50 - Desmodosnus subspicatus - 2000 mg/l - 72 h	LC50 - Pimephales promelas - 9,640 mg/l - 96 h		EC50 - Daphnia magna - 5,102 mg.l - 96 h
Ethyl Alcohol 64-17-5		LC50 - Pimephales promelas - 15,300 mg/l - 96 h	EC50 - 34,634 mg/l 30 min EC50 - 35470 mg/l 5 min	EC50 - Daphnia magna - 9,268- 14221 mg.l - 48 h
2(2-Ethoxythoxy)ethanol 111-90-0		LC50 - Pimephales promelas - 9,650 mg/l - 96 h		EC50 - Daphnia magna - 3,340 mg.l - 48 h

**Persistence/Degradability:** Not determined  
**Bioaccumulation:** Not determined  
**Mobility:** Not determined  
**Other Adverse Effects:** No data available

**13. DISPOSAL CONSIDERATIONS**

**Disposal of Wastes:** Disposal should be in accordance with applicable regional, national and local laws and regulations.  
**Contaminated Packaging:** Dispose of as unused product in accordance with applicable regional, national and local laws and regulations

**SECTION 14 – TRANSPORT INFORMATION**

**DOT**

**UN number** 1210  
**Proper shipping name** Printing ink, Flammable  
**Hazard class** 3  
**Packing group** III  
**ERG#** 129

**IATA**

**UN number** 1210  
**Proper shipping name** Printing ink, Flammable  
**Hazard class** 3  
**Packing group** III

**IMDG**

**UN number** 1210  
**Proper shipping name** Printing ink, Flammable  
**Hazard class** 3  
**Packing group** III  
**Marine pollutant** No

**SECTION 15 – REGULATORY INFORMATION**

**TSCA status:** All Components listed

**Other Regulatory:**

**Ingredients**

	<u>SARA 302</u>	<u>SARA 311/312</u>	<u>SARA 313</u>	<u>RECRA</u>	<u>CERCLA</u>
1-Methoxy-2-propanol	No	F,A,C	No	No	No
2-Hydroxy-4-methyl-2-pentanone	No	F,A,C	No	No	No
2-Propanol	No	F,A,C	Yes	No	No
Ethyl Alcohol	No	F,C	No	No	No
2(2-Ethoxythoxy)ethanol	No	C	Yes	No	Yes

**SARA 311/312 Codes:**

R = Reactive Hazard  
P = Pressure Hazard  
F = Fire Hazard  
A = Immediate/Acute  
C = Delayed/Chronic

**California Pop. 65 Components:** Chemicals known to the state of California to cause birth defects or other reproductive harm  
 This product does not contain any chemicals known to the state of California to cause cancer, birth defects or other reproductive harm

<b>SECTION 16 – OTHER INFORMATION</b>
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**HMIS:**

<b>Health:</b>	2
<b>Chronic Health Hazard</b>	*
<b>Flammability:</b>	3
<b>Reactivity:</b>	0

**Disclaimer of Liability**

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