1. PRODUCT IDENTIFICATION

PRODUCT NAME: #100 Solvent
PRODUCT COLOR: Clear
PRODUCT CODE: I0100-S010, I0100-S011(GL), I0100-S014(QT)
RECOMMENDED USE: Coding and Marking

Manufacturer/Supplier:
Pannier Corporation
207 Sandusky Street
Pittsburgh, PA 15212 USA
412-323-4900
Email: sales@pannier.com

Emergency Telephone INFOTRAC: 1-800-535-5053

2. HAZARDS IDENTIFICATION

Emergency Overview:

GHS Classification:

<table>
<thead>
<tr>
<th>Category</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable liquids</td>
<td>Category 3</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 2A</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Category 3</td>
</tr>
</tbody>
</table>

GHS label elements, including precautionary statements

Pictogram

Signal Word Warning

Hazard Statements

- H226 Flammable liquid and vapor
- H319 Causes serious eye irritation
- H336 May cause drowsiness or dizziness
Precautionary Statements

P210  Keep away from heat/sparks/open flames/hot surfaces
P243  Take precautionary measures against static discharge
P261  Avoid breathing dust/fume/gas/mist/vapors/spray
P264  Wash skin thoroughly after handling
P271  Use only outdoors or in a well-ventilated area
P280  Wear protective gloves/protective clothing/eye protection/face protection
P303+P361+P353  IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.
                   Rinse skin with water/shower
P304+P340  IF INHALED: Remove victim to fresh air and keep at rest in a position
                   comfortable for breathing
P305+P351+P338  IF IN EYES: Rinse continually with water for several minutes. Remove contact
                   lenses, if present and easy to do. Continue rinsing
P312  Call a POISON CENTER or doctor/physician if you feel unwell
P337+P313  If eye irritation persists: Get medical advice/attention
P370+P378  In case of fire: Use Water spray, CO2, dry chemical, or alcohol resistant foam to
                   extinguish
P403+233  Store in a well-ventilated place. Keep container tightly closed
P501  Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION AND INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Methoxy-2-propanol</td>
<td>107-98-2</td>
<td>60-70</td>
</tr>
<tr>
<td>2-Propanol</td>
<td>67-63-0</td>
<td>30-40</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

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.

Eyes:  Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin:  Wash off with soap and plenty of water. Consult a physician.

Inhalation:  If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Most important symptoms and effects

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

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

Unsuitable extinguishing media:
Do not use a solid water stream as it may scatter and spread fire.

Specific hazards in case of fire:
Fight as volatile liquid fire
Flashback fires may occur
Vapors are dense and may travel to remote ignition source

Hazardous combustion products:
Carbon oxides, organic combustion products which may be toxic and/or irritating

Protective equipment and precautions for fire fighters:
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

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

Environmental precaution:
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 sand, filter-aid, vermiculite or other inert absorbent material, then place in a 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 exposed skin thoroughly after handling. Do not eat, drink of smoke when using this product. Wear protective gloves/protective clothing and eye/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Unscrew all caps slowly. Do not unscrew entirely until all pressure has been completely released. Keep away from heat/sparks/open flames/hot surfaces. Emptied containers may retain residues. Precautions apply to emptied containers.

Conditions for safe storage, including incompatibilities:
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:
### Appropriate engineering controls

Applying technical measures to comply with the occupational exposure limits. Local exhaust and mechanical ventilations 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks/Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state:</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Color:</td>
<td>Colorless</td>
<td></td>
</tr>
<tr>
<td>Odor:</td>
<td>Moderate</td>
<td></td>
</tr>
<tr>
<td>Odor threshold:</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>pH:</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point:</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Boiling point/Boiling range:</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Flash point:</td>
<td>27.8 °C / 82 °F</td>
<td>Tag Closed Cup</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>&lt;1</td>
<td>butyl acetate = 1</td>
</tr>
<tr>
<td>Flammability (solid, gas):</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Upper/lower flammability limits:</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure:</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Vapor density:</td>
<td>&gt;1</td>
<td>air = 1</td>
</tr>
<tr>
<td>Specific gravity:</td>
<td>0.9</td>
<td>water = 1</td>
</tr>
<tr>
<td>Water solubility:</td>
<td>Complete</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents:</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient:</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Auto-ignition Temperature:</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Viscosity:</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>VOC Content (%):</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>VOC Content:</td>
<td>7.5 lbs/gal</td>
<td></td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY
Reactivity:
Not reactive under normal conditions.

Chemical Stability:
Stable under recommended storage conditions.

Possibility of hazardous reactions:
None under normal processing.

Conditions to avoid:
Keep out of reach of children. Keep away from heat, sparks and open flame. Keep away from contact with incompatible materials.

Incompatible materials:
Strong oxidizing agents

Hazardous decomposition products:
Carbon oxides, thermal decomposition can lead to release of irritating and toxic gases and vapors.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye contact: Causes eye irritation
Skin contact: May cause skin irritation
Inhalation: May cause drowsiness or dizziness.
Ingestion: May be harmful if swallowed

Component Information:

<table>
<thead>
<tr>
<th>Chemical Name and CAS#</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Methoxy-2-propanol</td>
<td>= 4,016 mg/kg ( Rat )</td>
<td>&gt; 2,000 mg/kg ( Rabbit )</td>
<td>&gt; 25.8 mg/ ( Rat ) 5h</td>
</tr>
<tr>
<td>107-98-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-Propanol 67-63-0</td>
<td>= 5,840 mg/kg ( Rat )</td>
<td>&gt; 12,800 mg/kg ( Rabbit )</td>
<td>&gt; 10,000 mg/m³ ( Rat ) 6 h</td>
</tr>
</tbody>
</table>

Information on physical, chemical and toxicological effects:

Symptoms Please see section 4 of this SDS for symptoms

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Carcinogenicity:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legend
ACGIH (American Conference of Governmental Industrial Hygienists)
A1 – Confirmed human carcinogen
A2 – Suspected human carcinogen
A3 - Confirmed animal carcinogen with unknown relevance to humans
IARC (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
Group 2A – Probably Carcinogenic to Humans
Group 2B – Limited evidence of carcinogenicity
NTP (National Toxicology Program)
Known - Known Carcinogen
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Numerical measures of toxicity:
12. ECOLOGICAL INFORMATION

Ecotoxicity:

Component Information

<table>
<thead>
<tr>
<th>Chemical Name and CAS#</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Methoxy-2-propanol 107-98-2</td>
<td>ErC50 – Pseudokirchneriella subcapitata - &gt;1000 mg/L – 72d</td>
<td>LC50 - Pimephales promelas – 20,800 mg/L – 96h</td>
<td>No data</td>
<td>EC50 - Daphnia magna – 21,100-25,900 mg/L – 48h</td>
</tr>
<tr>
<td>2-Propanol 67-63-0</td>
<td>EC50 - Desmodesmus subspicatus - 2000 mg/L – 72h</td>
<td>LC50 - Pimephales promelas – 9,640 mg/L – 96h</td>
<td>No data</td>
<td>EC50 - Daphnia magna – 5,102 mg/L – 96h</td>
</tr>
</tbody>
</table>

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 – TRANSPORTATION INFORMATION

DOT
- UN number: 1210
- Proper shipping name: PRINTING INK RELATED MATERIAL
- Hazard class: 3
- Packing group: III
- ERG#: 129

IATA
- UN number: 1210
- Proper shipping name: PRINTING INK RELATED MATERIAL
- Hazard class: 3
- Packing group: III
IMDG

UN number 1210
Proper shipping name PRINTING INK RELATED MATERIAL
Hazard class 3
Packing group III
Marine pollutant No

SECTION 15 – REGULATORY INFORMATION

TSCA STATUS: All Components listed

OTHER REGULATORY:

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>SARA 302</th>
<th>SARA 311/312</th>
<th>SARA 313</th>
<th>RECRA</th>
<th>CERCLA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Methoxy-2-propanol</td>
<td>No</td>
<td>F, A</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2-Propanol</td>
<td>No</td>
<td>F, A, C</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

SARA 311/312 Codes:
R = Reactive Hazard
P = Pressure Hazard
F = Fire Hazard
A = Immediate/Acute
C = Delayed/Chronic

California Prop. 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 any other reproductive harm.

SECTION 16 – OTHER INFORMATION

HMIS:

Health: 2
Chronic Health Hazard *
Flammability: 3
Reactivity: 0

Revision Date 08-Aug-2018
Replaces: 15-Jun-2015
Revision Note: Review and update. Changes to Sections 4, 11, 12, 15

Prepared by: Don Wright

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