SECTION 1: Identification

1.1. Identification

Product form: Printing Ink; Mixture
Product name: CI-P70iMTS-IM1000 MAINT/FLUSH SOLN (UV-IM)- 1000ml
Product code: For Industrial Use Only by Qualified Personnel

1.2. Recommended use and restrictions on use

Use of the substance/mixture: Printing Ink Flush

1.3. Supplier

Company Name: PigmentInc
Address: 2/1 Skyline Place, Frenchs Forest NSW 2086 Sydney Australia
Telephone: Ph:+61-2-89772500  Fax:+61-2-94532403

Emergency telephone number: AUSTRALIA: 1800 638 556, NEW ZEALAND: 0800 154 666, INTERNATIONAL: +61 438465960

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification
Flam. Liq. 4
Repr. 1B

2.2. GHS Label elements, including precautionary statements

GHS-US labeling
Hazard pictograms (GHS-US): ☑

Signal word (GHS-US): Danger
Hazard statements (GHS-US): Combustible liquid
May damage fertility or the unborn child

Precautionary statements (GHS-US):
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Wear protective gloves/protective clothing/eye protection/face protection.
If exposed or concerned: Get medical advice/attention.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dipropylene glycol monomethyl ether</td>
<td>(CAS-No.) 34590-94-8</td>
<td>60 - 100</td>
</tr>
<tr>
<td>2-Methoxy-1-propanol</td>
<td>(CAS-No.) 1589-47-5</td>
<td>&lt; 1</td>
</tr>
</tbody>
</table>

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret
SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact: If skin irritation occurs: Wash skin with plenty of water. Obtain medical attention if irritation persists.

First-aid measures after eye contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation: May cause irritation to the respiratory tract.

Symptoms/effects after skin contact: May cause skin irritation. Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Symptoms/effects after ingestion: May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

4.3. Immediate medical attention and special treatment, if necessary

Symptoms may be delayed. Treat symptomatically. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media


Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard: Combustible liquid. Products of combustion may include, and are not limited to: oxides of carbon. Organic compounds.

Reactivity: No dangerous reactions known under normal conditions of use.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Cool closed containers exposed to fire with water spray.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Use special care to avoid static electric charges.

6.1.1. For non-emergency personnel
No additional information available

6.1.2. For emergency responders
No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment: Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment.

Methods for cleaning up: Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"
SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not swallow. Ensure good ventilation of the work station. Do not handle until all safety precautions have been read and understood. Handle and open container with care. Wear personal protective equipment. Obtain special instructions before use. Proper grounding procedures to avoid static electricity should be followed.

Hygiene measures: Wash contaminated clothing before reuse. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep out of the reach of children. Store tightly closed in a dry and cool place. Store in a well-ventilated place. Store locked up.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

**Dipropylene glycol monomethyl ether (34590-94-8)**

<table>
<thead>
<tr>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH ACGIH TWA (ppm)</td>
<td>100 ppm</td>
</tr>
<tr>
<td>ACGIH ACGIH STEL (ppm)</td>
<td>150 ppm</td>
</tr>
<tr>
<td>OSHA OSHA PEL (TWA) (mg/m³)</td>
<td>600 mg/m³</td>
</tr>
<tr>
<td>OSHA OSHA PEL (TWA) (ppm)</td>
<td>100 ppm</td>
</tr>
<tr>
<td>OSHA Limit value category (OSHA)</td>
<td>Prevent or reduce skin absorption</td>
</tr>
<tr>
<td>IDLH US IDLH (ppm)</td>
<td>600 ppm</td>
</tr>
<tr>
<td>NIOSH NIOSH REL (TWA) (mg/m³)</td>
<td>600 mg/m³</td>
</tr>
<tr>
<td>NIOSH NIOSH REL (TWA) (ppm)</td>
<td>100 ppm</td>
</tr>
<tr>
<td>NIOSH NIOSH REL (STEL) (mg/m³)</td>
<td>900 mg/m³</td>
</tr>
<tr>
<td>NIOSH NIOSH REL (STEL) (ppm)</td>
<td>150 ppm</td>
</tr>
<tr>
<td>NIOSH US-NIOSH chemical category</td>
<td>Potential for dermal absorption</td>
</tr>
</tbody>
</table>

**2-Methoxy-1-propanol (1589-47-5)**

Not applicable

8.2. Appropriate engineering controls

Appropriate engineering controls: Ensure good ventilation of the work station. Environmental exposure controls: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection: Wear suitable gloves

Eye protection: Safety glasses or goggles are recommended when using product.

Skin and body protection: Wear suitable protective clothing

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Other information: Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.
SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>Ether-like odor</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>-112 °F / -80 °C</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>&lt;= 374 °F / 190 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>≈ 167 °F / 75 °C (Closed cup)</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>≈ 0.02</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Combustible liquid</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>0.07 hPa @ 77 °F / 25 °C</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>5.11</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific gravity / density</td>
<td>0.956 g/cm³ @ 68 °F / 20 °C</td>
</tr>
<tr>
<td>Solubility</td>
<td>Water: completely soluble</td>
</tr>
<tr>
<td>Partition coefficient n-octanol/water</td>
<td>-0.35</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>3.4 mPa.s</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>LEL: 1.1 vol %</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>UEL: 14 vol %</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk density</td>
<td>1.06 kg/m³</td>
</tr>
</tbody>
</table>

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid


10.5. Incompatible materials


10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. Organic compounds. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

Dipropylene glycol monomethyl ether (34590-94-8)

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>5.35 g/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>9500 mg/kg</td>
</tr>
</tbody>
</table>
2-Methoxy-1-propanol (1589-47-5)

LD50 oral rat 5710 mg/kg
LD50 dermal rabbit 5660 mg/kg

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : May damage fertility or the unborn child.
Specific target organ toxicity – single exposure : Not classified
Specific target organ toxicity – repeated exposure : Not classified
Aspiration hazard : Not classified

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.
Symptoms/effects after skin contact : May cause skin irritation. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general : May cause long-term adverse effects in the aquatic environment.

Dipropylene glycol monomethyl ether (34590-94-8)

LC50 fish 1 > 10000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 1 1919 mg/l (Exposure time: 48 h - Species: Daphnia magna)

12.2. Persistence and degradability

X1 Series Inks - FLUSH
Persistence and degradability Readily biodegradable. Not established.

12.3. Bioaccumulative potential

X1 Series Inks - FLUSH
Partition coefficient n-octanol/water -0.35
Bioaccumulative potential Not established.

Dipropylene glycol monomethyl ether (34590-94-8)
Partition coefficient n-octanol/water -0.064 (at 20 °C)

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
Other information : No other effects known.

SECTION 13: Disposal considerations

13.1. Disposal methods
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Additional information : Handle empty containers with care because residual vapors are flammable.

SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT
UN-No.(DOT) : NA1993
Proper Shipping Name (DOT) : Combustible liquid, n.o.s.
Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
SECTION 15: Regulatory information

15.1. US Federal regulations
All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations
No additional information available

15.3. US State regulations
No additional information available

SECTION 16: Other information

Date of issue : 02/05/2018
Revision date : 02/05/2018
Other information : None.
Prepared by : Nexreg Compliance Inc.

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