SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name
Product code

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Printing ink

1.3. Supplier

Product Name: LED CURABLE INK
CI-P70iC-IM500/1000 - CYAN Ink (UV-IM)-500/1000ml
CI-P70iM-IM500/1000 - MAGENTA Ink (UV-IM)-500/1000ml
CI-P70iY-IM500/1000 - YELLOW Ink (UV-IM)-500/1000ml
CI-P70iK-IM500/1000 - BLACK Ink (UV-IM)-500/1000ml
CI-P70iW-IM500/1000 - WHITE Ink (UV-IM)-500/1000ml
CI-P70iCLEAR-IM500/1000 - CLEAR Varnish (UV-IM)-500/1000ml

Manufacturer: PigmentInc
Address: 2/1 Skyline Place, Frenchs Forest NSW 2086 Sydney Australia Ph:+61-2-89772500 Fax:+61-2-94532403
Emergency Phone #: 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
Acute Tox. 4 (Oral)
Skin Sens. 1
Carc. 2
Repr. 1B
STOT RE 2

2.2. GHS Label elements, including precautionary statements

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

Signal word (GHS-US) : Danger
Hazard statements (GHS-US):
Harmful if swallowed
May cause an allergic skin reaction
Suspected of causing cancer
May damage fertility or the unborn child
May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS-US):
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash hands, forearms and face thoroughly after handling.
Do not eat, drink or smoke when using this product.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.
If exposed or concerned: Get medical advice/attention.
If swallowed: Call a poison center or doctor if you feel unwell Rinse mouth.
If on skin: Wash with plenty of water.
Wash contaminated clothing before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
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)

97.5% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)

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>Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide</td>
<td>(CAS-No.) 75980-60-8</td>
<td>1 - 10</td>
</tr>
<tr>
<td>Acrylic Oligomer</td>
<td>(CAS-No.) Trade Secret</td>
<td>&lt; 3</td>
</tr>
<tr>
<td>Acrylic ester</td>
<td>(CAS-No.) Trade Secret</td>
<td>&lt; 3</td>
</tr>
<tr>
<td>Phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl)-</td>
<td>(CAS-No.) 162881-26-7</td>
<td>&lt; 3</td>
</tr>
<tr>
<td>Photoinitiator</td>
<td>(CAS-No.) Trade secret</td>
<td>&lt; 3</td>
</tr>
<tr>
<td>Butyl benzyl phthalate</td>
<td>(CAS-No.) 85-68-7</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Acrylate Monomer 02</td>
<td>(CAS-No.) Trade secret</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 ON SKIN: Wash with plenty of Water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.

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 : IF SWALLOWED: Rinse mouth. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Call a POISON CENTER or doctor/physician 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. May cause an allergic skin reaction.

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 : Harmful if swallowed. 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. 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 : Products of combustion may include, and are not limited to: oxides of carbon.

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.

#### 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:** Do not get in eyes, on skin, or on clothing. Do not breathe dust, fume, gas, mist, spray, vapors. Do not swallow. Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Handle and open container with care. Wear personal protective equipment.

**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. Keep container tightly closed and in well ventilated place. Store locked up.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Control parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide (75980-60-8)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Acrylic ester (Trade Secret)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Acrylic Oligomer (Trade Secret)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl) (162881-26-7)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Photoinitiator (Trade secret)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Butyl benzyl phthalate (85-68-7)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Acrylate Monomer 02 (Proprietary)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### 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 resistant to chemical penetration
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**

<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>No data available</td>
</tr>
<tr>
<td>Color</td>
<td>Various</td>
</tr>
<tr>
<td>Odor</td>
<td>No data available</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>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient n-octanol/water</td>
<td>No data available</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>No data available</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information

No additional information available

**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.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat. Incompatible materials.

10.5. Incompatible materials

Acids. Strong oxidizing agents.
10.6. Hazardous decomposition products
May include, and are not limited to: oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity: Harmful if swallowed.

<table>
<thead>
<tr>
<th>X1 Ink Series – Cyan, Magenta, Yellow, Black, White, Varnish</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE US (oral)</td>
</tr>
</tbody>
</table>

Photoinitiator (Trade secret)

| ATE US (oral) | 500 mg/kg body weight |

Butyl benzyl phthalate (85-68-7)

<table>
<thead>
<tr>
<th>Butyl benzyl phthalate (85-68-7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
</tr>
<tr>
<td>LD50 dermal rat</td>
</tr>
<tr>
<td>LC50 inhalation rat</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Not classified
Serious eye damage/irritation: Not classified
Respiratory or skin sensitization: May cause an allergic skin reaction.
Germ cell mutagenicity: Not classified
Carcinogenicity: Suspected of causing cancer.

<table>
<thead>
<tr>
<th>Butyl benzyl phthalate (85-68-7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC group</td>
</tr>
<tr>
<td>National Toxicology Program (NTP) Status</td>
</tr>
</tbody>
</table>

Reproductive toxicity: May damage fertility or the unborn child.
Specific target organ toxicity – single exposure: Not classified
Specific target organ toxicity – repeated exposure: May cause damage to organs through prolonged or repeated exposure.
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. May cause an allergic skin reaction.
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: Harmful if swallowed. 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.

<table>
<thead>
<tr>
<th>Butyl benzyl phthalate (85-68-7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
</tr>
<tr>
<td>LC50 fish 2</td>
</tr>
<tr>
<td>EC50 Daphnia 2</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
X1 Ink Series – Cyan, Magenta, Yellow, Black, White, Varnish
Persistence and degradability: Not established.

12.3. Bioaccumulative potential
X1 Ink Series – Cyan, Magenta, Yellow, Black, White, Varnish
Bioaccumulative potential: Not established.
Butyl benzyl phthalate (85-68-7)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BCF fish 1</td>
<td>187.65</td>
</tr>
<tr>
<td>Partition coefficient n-octanol/water</td>
<td>3.57 - 4.91</td>
</tr>
</tbody>
</table>

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.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

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

WARNING This product can expose you to Benzophenone, which is known to the State of California to cause cancer, and Butyl benzyl phthalate, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

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

www.Nexreg.com

SDS US (GHS HazCom 2012)_NEXREG_NEW

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