Kornit Water-based Ink V223

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

PRODUCT NUMBER 50-WBIx-0223
PRODUCT IDENTIFICATION Kornit Water-based Ink V223
RELEVANT USE OF MIXTURE Water-based ink for digital textile printing

INFORMATION CONCERNING MSDS SUPPLIER

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EMERGENCY CALL NUMBERS

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Asia Pacific: +852 8120 5492

2. HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture
- Classification according to EC Directive 1999/45/EC: Not classified.

2.2 Labeling components
- Labeling in accordance with EC Directive 1999/45/EC
  Symbols/Indication of danger - -
  Risk Phrase(s) NC Not classified
  Safety Phrase(s) S2 Keep out of the reach of children
                 S24/25 Avoid contact with skin and eyes
                 S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
                 S28 After contact with skin, wash immediately with plenty
Kornit Water-based Ink V223

of water

S51 Use only in well-ventilated areas

S29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point

2.3 Other hazards

No additional hazards are known except those derived from the labelling.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanediol</td>
<td>107-21-1</td>
<td>203-473-3</td>
<td>Xn; R22</td>
<td>Acute Tox. 4 H302</td>
<td>2.5 – 10%</td>
</tr>
<tr>
<td>Propane-1,2-diol</td>
<td>57-55-6</td>
<td>200-338-0</td>
<td>-</td>
<td>-</td>
<td>10 – 25%</td>
</tr>
<tr>
<td>2-butoxyethanol</td>
<td>111-76-2</td>
<td>203-905-0</td>
<td>Xn; R20/21/22 Xi; R36/38</td>
<td>Acute Tox. 4 H332 H312 H302 Eye Irrit. 2 H319 Skin Irrit. 2 H315</td>
<td>&lt; 2.5%</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

4.1 Description of the first aid measures

- **Inhalation:** Move to fresh air.
- **Skin contact:** Wash with water and soap as a precaution. If skin irritation persists, call a physician.
- **Eye contact:** Rinse with plenty of water. If eye irritation persists, consult a specialist.
- **Ingestion:** Drink 1-2 glasses of water. Consult a physician if necessary.

4.2 Main symptoms and acute deferred effects

No information available.
4.3 Indications of possible immediate medical care and particular treatment required
No information available.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media
Extinguish with foam, carbon dioxide, dry powder or water fog.

5.2 Special hazards resulting from substance or mixture
The product is non-combustible. If heated, corrosive and toxic vapors/gases may be formed.

5.3 Advice to firefighters
Use self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

6.1 Individual precautions, protection equipment and emergency procedures
Wear gloves and suitable goggles. Do not inhale the vapors. Keep away from any sources of ignition. No smoking.

6.2 Precautions for protection of environment
Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

6.3 Methods and materials of confinement and cleaning up
Pick up with absorbent material (e.g. sand, diatomaceous earth, acid binder, universal binder, sawdust). Dispose of as prescribed.

6.4 Reference to other sections
Refer to Section 7 for information on safe handling.
Refer to Section 8 for information on personal protection equipment.
Refer to Section 13 for disposal information.
7. HANDLING AND STORAGE

7.1 Precautions for safe handling

- Keep out of reach of children. Avoid contact with skin and eyes.
- Do not swallow. Do not inhale the vapors.
- Wash your hands thoroughly after handling.
- Wash soiled clothing before reuse.
- Comply with conditions of use.

7.2 Conditions for safe storage, including any incompatibilities

- Keep container tightly closed in a dry and well-ventilated place.
- Store in closed original container at temperatures between 5°C and 35°C.
- Protect from freezing and direct sunlight.

7.3 Special final uses

- No further recommendations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

- Exposure limit values

  Ingredients with limit values that require monitoring at the workplace:

  **CAS-No. 57-55-6 Propane-1,2-diol**

<table>
<thead>
<tr>
<th>WEL</th>
<th>Long-term exposure limit (8 hour reference period):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total vapor and particulates: 150 ppm (474 mg/m³)</td>
</tr>
<tr>
<td></td>
<td>Particulate: 10 mg/m³</td>
</tr>
</tbody>
</table>

  **CAS-No. 107-21-1 Ethanediol**

<table>
<thead>
<tr>
<th>WEL</th>
<th>Long-term exposure limit (8 hour reference period):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Particulate: 10 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Vapor: 20 ppm (52 mg/m³)</td>
</tr>
</tbody>
</table>

  |     | Short-term exposure limit (15 min reference period): |
  |     | Vapor: 40 ppm (104 mg/m³)                         |
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CAS-No. 111-76-2 2-Butoxyethanol

<table>
<thead>
<tr>
<th>WEL</th>
<th>Long-term exposure limit (8 hour reference period): 25 ppm (Sk)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Short-term exposure limit (15 min reference period): 50 ppm (Sk)</td>
</tr>
</tbody>
</table>

- **Additional information**: The lists valid during the making were used as basis.

8.2 Exposure controls

- **Engineering measures**: Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors.
- **Respiratory equipment**: Work in a well-ventilated place.
- **Hand protection**: Wear gloves.
- **Eye protection**: Protection goggles.
- **Skin and body protection**: Protective clothing. Wash hands after use. Do not eat or smoke during use.
- **Hygiene measures**: Handle in accordance with good industrial hygiene and safety practice.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

9.1 Information about essential physical and chemical properties

- **Appearance**: Colored liquid
- **Odor**: Characteristic
- **pH**: 8 – 9
- **Flash point**: > 100 °C
- **Flammability (solid, gaseous)**: Not applicable
- **Decomposition temperature**: Not determined
- **Self-igniting**: Product is not self-igniting
- **Danger of explosion**: Product does not present an explosion hazard
- **Density**: 1.06 – 1.08 gr/cm³
- **Solubility in water**: Fully miscible
Viscosity  
10.0 – 14.0 cP

9.2 Other information

Volatile Organic Compound (VOC):

<table>
<thead>
<tr>
<th>VOC</th>
<th>50-WBIX-0223</th>
<th>50-WBIM-0223</th>
<th>50-WBIY-0223</th>
<th>50-WBIK-0223</th>
<th>50-WBIG-0223</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>x=C – Cyan</td>
<td>Magenta</td>
<td>Yellow</td>
<td>Black</td>
<td>Green</td>
</tr>
<tr>
<td>g/liter</td>
<td>475</td>
<td>486</td>
<td>421</td>
<td>473</td>
<td>382</td>
</tr>
<tr>
<td>lb/gallon</td>
<td>3.96</td>
<td>4.05</td>
<td>3.51</td>
<td>3.95</td>
<td>3.19</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

10.1 Reactivity
Not available.

10.2 Chemical stability
Chemically stable under normal conditions of use.

10.3 Possibility of hazardous reactions
No dangerous reactions known.

10.4 Conditions to avoid
No further relevant information available.

10.5 Incompatible materials
No further relevant information available.

10.6 Hazardous decomposition products
No dangerous decomposition products known.
11. TOXICOLOGICAL INFORMATION

11.1 Information about toxicological effects

- **Acute toxicity:**
  Oral Toxicity LD$_{50}$ Rat: $>6400$ mg/Kg
  (Based on literature)

- **Primary irritant effect:**
  On the skin: No irritant effect.
  On the eye: No irritating effect.
  **Sensitization:** No sensitizing effects known.

- **Potential health effects:**
  Inhalation: No further relevant information available.
  Ingestion: No further relevant information available.

- **Additional toxicological information:**
  The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.
  When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

- **Aquatic toxicity:**
  Toxicity to Fish – Rainbow Trout LC$_{50}$: $>1500$ mg/l/96h
  (Based on literature)

12.2 Persistence and degradability

  $>74\%$ (degradation OECD 301).

12.3 Bioaccumulation potential

  No further relevant information available.
12.4 Mobility in the soil
No further relevant information available.

12.5 Results of PBT and vPvB assessments
- PBT: Not applicable.
- vPvB: Not applicable.

12.6 Other detrimental effects
No further relevant information available.

13. DISPOSAL CONSIDERATIONS

13.1 Methods of waste
Do not dump residue into drain.
The chemicals must be eliminated in keeping with applicable regulations.
Packaging of chemical products must be eliminated in keeping with applicable regulations.

14. TRANSPORTATION INFORMATION

<table>
<thead>
<tr>
<th>Land transport ADR/RID (cross-border)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR/RID class: Not dangerous goods</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Maritime transport IMDG:</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMDG Class: Not dangerous goods</td>
</tr>
<tr>
<td>Marine pollutant: No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Air transport ICAO-TI and IATA-DGR (56th addition):</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICAO/IATA Class: Not dangerous goods</td>
</tr>
</tbody>
</table>

- Special precautions for user:
  Air shipping or temperature controlled shipping container.
  While transporting this material avoid temperatures under -5°C and above 35°C.
  Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:
  Not applicable.
15. REGULATORY INFORMATION

15.1 Special regulations/legislation for substance or mixture in terms of safety, health and environment

- European Inventory of Existing Commercial Chemical Substances (EINECS)
  This product satisfies all the requirements of the European Inventory of Existing Chemical Substances (EINECS).
- United States TSCA Inventory (US.TSCA)
  All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

15.2 Chemical safety evaluation

No chemical safety assessment has been carried out.

16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Abbreviations:

  LD<sub>50</sub>  Lethal dose 50%
  LC<sub>50</sub>  Lethal concentration 50%
  WEL  Workplace exposure limit
  Xn  Harmful
  Xi  Irritant
  R20/21/22  Harmful by inhalation, in contact with skin and if swallowed
  R36/38  Irritating to eyes and skin
  H302  Harmful if swallowed
  H312  Harmful in contact with skin
  H315  Causes skin irritation
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H319 Causes serious eye irritation
H332 Harmful if inhaled

- **Other Information:**
  
  Department issuing MSDS:
  Kornit Digital Ltd. – Chemistry Department.
  
  Contact:
  
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  Fax: +972 (3) 908 0280
  E-mail: Chemistry@kornit.com

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