

MATERIAL SAFETY DATA SHEET (MSDS)

Conforms to regulation (EC) No. 453/2010



Date issued: 24-Apr-2014

MSDS No.: 60-MSDS-0048

Date revised: 03-Feb-2015

Revision No.: 1.1

Kornit Water-based Ink V223

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

PRODUCT NUMBER 50-WBlx-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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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

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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

	CAS-No.	EC No.	Classification (67/548/EEC)	Classification (EC 1272/2008)	50-WBI _x -0223 x=C – Cyan Y - Yellow	50-WBI _x -0223 x= M – Magenta K – Black
Ethanediol	107-21-1	203-473-3	Xn; R22	Acute Tox. 4 H302	2.5 – 10%	2.5 – 10%
Propane-1,2-diol	57-55-6	200-338-0	-	-	10 – 25%	10 – 25%
2-butoxyethanol	111-76-2	203-905-0	Xn; R20/21/22 Xi; R36/38	Acute Tox. 4 H332 H312 H302 Eye Irrit. 2 H319 Skin Irrit. 2 H315	< 2.5%	< 2.5%

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.

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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.

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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

WEL	Long-term exposure limit (8 hour reference period): Total vapor and particulates: 150 ppm (474 mg/m ³) Particulate: 10 mg/m ³
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CAS-No. 107-21-1 Ethanedoil

WEL	Long-term exposure limit (8 hour reference period): Particulate: 10 mg/m ³ Vapor: 20 ppm (52 mg/m ³)
	Short-term exposure limit (15 min reference period): Vapor: 40 ppm (104 mg/m ³)

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CAS-No. 111-76-2 2-Butoxyethanol

WEL	Long-term exposure limit (8 hour reference period): 25 ppm (Sk)
	Short-term exposure limit (15 min reference period): 50 ppm (Sk)

- **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/cm ³
Solubility in water	Fully miscible

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Viscosity 10.0 – 14.0 cP

9.2 Other information

Volatile Organic Compound (VOC):

VOC	50-WBIx-0223 x=C – Cyan R – Red	50-WBIM-0223 Magenta	50-WBIY-0223 Yellow	50-WBIK-0223 Black	50-WBIG-0223 Green
g/liter	475	486	421	473	382
lb/gallon	3.96	4.05	3.51	3.95	3.19

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.

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11. TOXOLOGICAL INFORMATION

11.1 Information about toxicological effects

- **Acute toxicity:**

Oral Toxicity LD₅₀ 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 LC₅₀: > 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.

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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

Land transport ADR/RID (cross-border)

- **ADR/RID class:** Not dangerous goods

Maritime transport IMDG:

- **IMDG Class:** Not dangerous goods
- **Marine pollutant:** No

Air transport ICAO-TI and IATA-DGR (56th addition):

- **ICAO/IATA Class:** Not dangerous goods

- **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.

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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:**

LD₅₀ Lethal dose 50%

LC₅₀ 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:

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