

Inkjet Black Pigment ink-MRKWK01

M1000010 Version:1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

| 1.1. Product identifier | |
|--------------------------------|--|
| Product / Trade name: | Inkjet Black Pigment ink – MRKWK01 (water based) |
| Synonyms: | None |
| Proper shipping name: | None |
| Other means of identification: | None |
| | |

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

For Screen Engraving/Film Masking

For Professional/Industrial use only

1.2.2. Uses advised against

Advice against other uses

| 1.3. | Details of | the supplier of | of the safety | data sheet |
|------|------------|-----------------|---------------|------------|
| | | | | |

| Supplier name: Address: | Kothari InfoTech Ltd. D202, Indoworld Commercial Complex, Behind Kadiwala, High school, Ring Road, Surat, |
|----------------------------|--|
| | Gujarat, Pin code; 395002 |
| Telephone: | +91- 261-2365946 |
| Fax: | +91-261-2460827 |
| E-mail: | ankitm@kothariinfotech.com |

Importer name: Address:

Telephone: E-mail:

1.4. Emergency telephone number

| Country | Advisory body | Address | Emergency number |
|--------------------|--|----------------------|--------------------------------------|
| India | | Kothari Infotech Ltd | 0091-261-2365945 (10am-6pm, Mon-Sat) |
| European countries | European Emergency Number Association | | 112 (24/7 available) |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Directive 1999/45/EC Not classified The product is not classified as dangerous according to the Council Directive 1999/45/EEC

Classification according to Regulation (EC) No 1272/2008 (CLP) Not classified The product is not classified hazardous according to the Regulation (EC) No 1272/2008

Other adverse physico-chemical, human health and environmental effects None

2.2. Label elements

Labelling according to Directive 1999/45/EC

Not applicable

According to Regulation (EC) No. 453/2010 and 1907/2006/EC

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Symbol: None

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Not applicable.

2.3. Other hazards

No reliable data available.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | CAS No. | EC No. | Index No. | REACH No. | % wt/wt | Classification according to (EC) No1272/2008 (CLP) | Classification according to Directive 67/548/EEC |
|-----------------|----------|-----------|--------------|--------------|---------|--|---|
| Ethylene Glycol | 107-21-1 | 203-473-3 | 603-027-21-1 | | <25 | Acute Tox4; H302 | Xn R 22 |

Note: Undisclosed components are not classified or water.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation: Move victim to fresh air. If not breathing, give artificial respiration. Get medical attention.

Skin contact: Immediately wash with plenty of soap and water. Get medical attention if irritation occurs.

Eye contact: Immediately flush eyes with running water for at least 20 minutes holding eyelids open. Get medical attention.

Ingestion: If swallowed, Refer for medical attention, without delay. Do not induce vomiting. Give 1-2 glasses of water to a conscious victim. Never give anything by mouth to an unconscious victim. Get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical, and toxicological properties have not been

thoroughly investigated.

However, occupational exposure to pigments may result in respiratory or skin sensitization or eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

No reliable data available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

There is no restriction on the type of extinguisher which may be used. Use extinguishing media suitable for surrounding area.

5.2. Special hazards arising from the substance or mixture

No data available.

5.3. Advice for firefighters

Alert Fire Brigade and tell them location and nature of hazard.

Wear breathing apparatus plus protective gloves.

Prevent, by any means available, spillage from entering drains or water courses.

Use water delivered as a fine spray to control fire and cool adjacent area.

DO NOT approach containers suspected to be hot.

According to Regulation (EC) No. 453/2010 and 1907/2006/EC

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Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire.

Wear suitable protective equipments while handling.

6.1.2. For emergency responders

Wear suitable protective equipments.

6.2. Environmental precautions

Take precautions to prevent entry into waterways, sewers, or surface drainage systems. Dispose according to local or international regulations.

6.3. Methods and material for containment and cleaning up

Use appropriate tools to put the spilled material in suitable container for recovery or disposal, avoid raising dust.

6.4. Reference to other sections

Personal Protective Equipment advice is contained in Section 8 of the MSDS

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid ingestion, inhalation, skin and eye contact. Minimize dust generation and accumulation. Handle in accordance with good industrial hygiene practice and any legal requirements.

7.2. Conditions for safe storage, including any incompatibilities

Note: For the best performance of the inks for application it is advisable to store and transport between 10 deg C to 35 deg C Suitable container: PP/ HDPE/LDPE plastic can or drums. Check all containers are clearly labelled and free from leaks. Keep container tightly closed in the ventilated place. Store in dry place. Keep away from heat and direct sunlight.

Storage incompatibility: Avoid reaction with incompatible substances. Avoid reaction with oxidizing agents.

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available.

8.2. Exposure controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. W ell-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

General Personal Protection: Safety goggles or face shield, chemical resistant gloves, protective clothing and apparatus.

| SECTION 9: Physical and chemical pr | operties |
|---|-------------------|
| 9.1. Information on basic physical and ch | emical properties |
| Physical state: | Liquid |
| Colour: | Black |
| Odour: | Very Mild |
| Odour threshold | No data available |

According to Regulation (EC) No. 453/2010 and 1907/2006/EC

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| pH: | 7~9 |
|---|-------------------|
| Melting point / Freezing point: | Not applicable |
| Boiling point: | >100°C |
| Flash point: | >100°C |
| Evapotation rate: | Not established |
| Flammability (solid, gas): | Non flammable |
| Upper/lower flammability: | No data available |
| Explosive limits: | No data available |
| Vapour pressure: | No data available |
| Vapour density | No data available |
| Density g/cm3: | 1.12 |
| Water Solubility(ies): | Soluble |
| Partition coefficient: n-octanol/water: | No data available |
| Auto-ignition temperature: | Not applicable |
| Viscosity: | 3-12cPs |
| Explosive properties: | Not explosive |
| Oxidising properties: | Not oxidising |

9.2. Other information

No additional data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal storage conditions. May react with strong oxidizing agents and incompatible materials.

10.2. Chemical stability

Product is considered stable during storage and transportation under normal condition.

10.3. Possibility of hazardous reactions

Stable under normal conditions. Hazardous reactions may occur if contact with incompatible material.

10.4. Conditions to avoid

Heat and direct sunlight, high temperature, ignition sources (sparks, flames, static), incompatible materials.

10.5. Incompatible materials

No data available

10.6. Hazardous decomposition products

Thermal decomposition products: may emit toxic fumes. Oxides of carbon, sulphur, nitrogen, zinc and phosphorus.

SECTION 11: Toxicological information 11.1. Information on toxicological effects

Data available for the mixture.

(a) Acute Oral Toxicity

No data available

- (b) Mutagenicity
 - No data available
- (c) STOT- Repeated exposures No data available
- (d) Reproductive Toxicity
- No data available

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(e) Aspiration hazard: not tested

Other information: None

| SECTION 12: Ecological information |
|------------------------------------|
|------------------------------------|

12.1. Aquatic Toxicity

No data available

12.2. Persistence and degradability

Abiotic Degradation: No data available Physical- and photo-chemical elimination: No data available Biodegradation: No data available

12.3. Bioaccumulative potential

Bioconcentration factor (BCF): No data available

12.4. Mobility in soil

Distribution to environmental compartments: No data available

Adsorption/ Desorption: No data available

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal: refer to specific national regulation. Do not discharge into sewer or waterways. Contaminated packaging: contaminated, empty containers must be disposed of as chemical waste.

SECTION 14: Transport information

Note: For the best performance of the inks for application it is advisable to store and transport between 10 deg C to 35 deg C.

| Land transport (ADR / RID | / GGVSE) | | | |
|---------------------------------|---------------------|--------------------------------------|-----------------------------------|-------------------|
| 14.1 UN number | Not applicable | 14.4 Packing group | Not applicable | |
| 14.2 UN proper shipping name | Not dangerous goods | 14.5 Environmental hazard | No relevant data | |
| 14.3 Transport hazard class(es) | Not applicable | 14.6 Special precautions for user | Hazard identification (Kemler) | Not applicable |

Air transport (ICAO-IATA / DGR)

| 14.1 UN number | Not applicable | 14.4 Packing group | Not applicable |
|------------------------------|----------------|------------------------------|-------------------|
| 14.2 UN proper shipping name | Not applicable | 14.5 Environmental hazard | No relevant data |
| 14.3 Transport hazard | Not applicable | 14.6 Special | No data available |
| class(es) | | precautions for user | |

According to Regulation (EC) No. 453/2010 and 1907/2006/EC

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| Inland waterways transport (ADNR / River Rhine) | | | | | |
|---|----------------|------|--|--|--|
| 14.1 UN number | None | | | | |
| 14.2 UN proper shipping nam e | None | | | | |
| 14.3 Transport hazard class(es) | None | | | | |
| 14.4 Packing group | None | | | | |
| 14.5 Environment al hazards | None | | | | |
| 14.6 Special precautions for user | Classification | None | | | |
| | code | None | | | |
| | Equipment | None | | | |
| | Fire cones | None | | | |

Sea Transport (IMDG code-GGVSee)

| 14.1 UN number | None | 14.4 Packing group | None | |
|---------------------------------|------|------------------------------|------------|------|
| 14.2 UN proper shipping name | None | 14.5 Environmental hazard | None | |
| | | 14.6 Special precautions for | EMS Number | None |
| 14.3 Transport hazard class(es) | None | user | | None |

14.7. Transport in bulk according to Annex II of MARPOL 73 / 78 and the IBC code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

This safety data sheet is in compliance with the following EU legislation and its adaptations – as far as applicable - 67/548/EEC, 1999/45/EC, Regulation (EC) No 1272/2008, Regulation (EC) No. 453/2010; Regulation (EC) No 1907/2006, 98/24/EC, 92/85/EEC, 94/33/EC, 91/689/EEC and 1999/13/EC.

15.1.2. International/National regulations

No data available

15.1.3. Regulation for ingredients

None

15.2. Chemical safety assessment

No chemical safety assessment report was provided for this safety data sheet compilation.

SECTION 16: Other information

16.1 Key literature references and sources for data

- ESIS (European chemical Substances Information System), http://esis.jrc.ec.europa.eu/

- REACH registered chemicals, http://echa.europa.eu/chem_data_en.asp

- IFA GESTIS - International limit values for chemical agents - occupational exposure limits (OELs), http://www.dguv.de/ifa/en/gestis/limit_values/index.jsp

This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any legal regulation. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

16.2 List of relevant hazard statements and risk phrases

Not a dangerous substance according to GHS/CLP.

This substance is not classified as dangerous according to Directive 1999/45/EEC

16.3 Other

According to Regulation (EC) No. 453/2010 and 1907/2006/EC

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This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any legal regulation. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

For detailed advice on Personal Protective Equipment, refer to the following EUCEN Standards:

EN 16 Personal eye - protection

EN 340 Protective clothing

EN 374 Protective gloves against chemicals and micro – organisms

EN 13832 Footwear protecting against chemicals

EN 133 Respiratory protective devices.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.