

Safety Data Sheet

Section 1 – Identification

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| Product identifier | TP410 Black |
| Product code | TP410-K-2L |
| Recommended use of the chemical and restrictions on use | Inkjet printing ink |
| Details of manufacturer | MIMAKI ENGINEERING CO., LTD. 2182-3 Shigeno-otsu, Tomi-shi, Nagano 389-0512 JAPAN +81-268-64-2413 |
| Details of Importer / Distributor | MIMAKI AUSTRALIA PTY LTD. Unit 14, 38-46 South Street, Rydalmere, NSW 2116, Australia + 61-2-8036-4500 |
| Emergency telephone number | +61 2 8014 4558 (within Australia only) 18000 74234 (within Australia only) +65 3158 1074 |

Section 2 – Hazard(s) Identification

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| Classification of the hazardous chemical | Not classified. |
| Label elements, including precautionary statements | |
| Pictograms or Symbols | None |
| Signal Word | None |
| Hazard Statements | None |
| Precautionary Statements | |
| Prevention | None |
| Response | None |
| Storage | None |
| Disposal | None |

Section 3 – Composition and Information on Ingredients

| Substances or mixture | Mixture | |
|-------------------------------|----------|--------------|
| Ingredients name | Contents | CAS RN |
| glycerol | 10-20% | 56-81-5 |
| propane-1,2-diol | 3-5% | 57-55-6 |
| 2,2'-(ethylenedioxy)diethanol | 3-5% | 112-27-6 |
| Others | 70-84% | Trade Secret |

Section 4 – First Aid Measures

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| Description of necessary first aid measures | |
| Eye contact | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get |

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| Inhalation | medical attention if irritation occurs. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. |
| Skin contact | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |
| Ingestion | Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |

Section 5 – Fire Fighting Measures

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| Extinguishing media | |
| Suitable extinguishing media | Use an extinguishing agent suitable for the surrounding fire. |
| Unsuitable extinguishing media | None known. |
| Specific hazards arising from the chemical | In a fire or if heated, a pressure increase will occur and the container may burst. |
| Hazardous thermal decomposition products | Decomposition products may include the following materials: carbon dioxide carbon monoxide |
| Special protective actions for fire-fighters | Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. |
| Special protective equipment for fire-fighters | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |

Section 6 – Accidental Release Measures

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| Personal precautions, protective equipment and emergency procedures | |
| For non-emergency personnel | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. |
| For emergency responders | If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". |
| Environmental precautions | Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). |
| Methods and materials for containment and cleaning up | |
| Small spill | Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, |



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Large spill

absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor.

Section 7 – Handling and Storage

Precautions for safe handling

Protective measures
Advice on general occupational hygiene

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8 – Exposure controls and personal protection

Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits |
|------------------|---|
| glycerol | Safe Work Australia (Australia, 12/2019). TWA: 10 mg/m³ 8 hours. EH40/2005 WELs (United Kingdom (UK), 1/2020). TWA: 10 mg/m³ 8 hours. Form: Mist DFG MAC-values list (Germany, 8/2020). TWA: 200 mg/m³ 8 hours. Form: inhalable fraction PEAK: 400 mg/m³, 4 times per shift, 15 minutes. Form: inhalable fraction |
| propane-1,2-diol | Safe Work Australia (Australia, 12/2019). TWA: 10 mg/m³ 8 hours. Form: Particulate TWA: 150 ppm 8 hours. Form: Vapor and particulates |

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| | <p>TWA: 474 mg/m³ 8 hours. Form: Vapor and particulates EH40/2005 WELs (United Kingdom (UK), 1/2020).</p> <p>TWA: 10 mg/m³ 8 hours. Form: Particulate</p> <p>TWA: 474 mg/m³ 8 hours. Form: total vapour and particulates</p> <p>TWA: 150 ppm 8 hours. Form: total vapour and particulates</p> |
| 2,2'-(ethylenedioxy)diethanol | <p>DFG MAC-values list (Germany, 8/2020).</p> <p>TWA: 1000 mg/m³ 8 hours. Form: inhalable fraction</p> <p>PEAK: 2000 mg/m³, 4 times per shift, 15 minutes. Form: inhalable fraction</p> |

Appropriate engineering controls

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must

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be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9 – Physical and Chemical Properties

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| Appearance | |
| Physical state | Liquid. |
| Color | Black. |
| Odor | Characteristic. |
| Odor threshold | Not available. |
| pH | 7–9 |
| Melting point/freezing point | Not available. |
| Boiling point | Not available. |
| Flash point | Not flammable |
| Evaporation rate | Not available. |
| Flammability(Solid,Gas) | Not available. |
| Flammability or explosive limits | |
| Lower limit | Not available. |
| Upper limit | Not available. |
| Vapor pressure | Not available. |
| Vapor density | Not available. |
| Relative density | 1.0–1.1 |
| Solubility | Not available. |
| Partition coefficient: n-octanol/water | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | 5–7mPa·s(25°C) |

Section 10 – Stability and Reactivity

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| Reactivity | No specific test data related to reactivity available for this product or its ingredients. |
| Chemical stability | The product is stable. |
| Possibility of hazardous reactions | Under normal conditions of storage and use, hazardous reactions will not occur. |
| Conditions to avoid | No specific data. |
| Incompatible materials | No specific data. |
| Hazardous decomposition products | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

Section 11 – Toxicological Information

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| Acute toxicity (Oral) | Not available. |
| Acute toxicity (Dermal) | Not available. |
| Acute toxicity (Inhalation : Gases) | Not available. |

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| Acute toxicity (Inhalation : Vapours) | Not available. |
| Acute toxicity (Inhalation : dust/mist) | Not available. |
| Skin corrosion/ Irritation | Not available. |
| Serious eye damage/ irritation | Not available. |
| Respiratory Sensitization | Not available. |
| Skin Sensitization | Not available. |
| Germ cell mutagenicity | Not available. |
| Carcinogenicity | Not available. |
| Reproductive toxicity | Not available. |
| Reproductive toxicity, effects on or via lactation | Not available. |
| Specific target organ toxicity – Single exposure | Not available. |
| Specific target organ toxicity – Repeated exposure | Not available. |
| Aspiration hazard | Not available. |

Section 12 – Ecological Information

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| Hazardous to the Aquatic Environment – Acute Toxicity | Not available. |
| Hazardous to the Aquatic Environment – Chronic Toxicity | Not available. |
| Hazardous to the Ozone layer | Not available. |

Section 13 – Disposal considerations

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| Disposal methods | Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. |
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Section 14 – Transport Information

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| International regulations | |
| IMDG | Not regulated. |
| IATA | Not regulated. |
| ADG | Not regulated. |

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Section 15 – Regulatory Information

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| Model Work Health and Safety Regulations – Scheduled Substances | No listed substance |
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16. OTHER INFORMATION

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| Literature References | SDS of raw material |
| Other data | The information suggested in this Safety Data Sheet does not comprehend everything and should be adopted only as a guide. The accuracy of the information and recommendations suggested herein are credible. However the company makes no warranty regarding such information and recommendations and disclaims all liability for reliance thereon. |