| HMIS CODES | H | 2 | F | 3 | R | 0 | PPE | BX |
|---|---|---|---|---|---|---|---|---|

# Paint Marker Ink

**All Colours**
**Trading Sky Co., Ltd.(China)**

# Safety Data Sheet

**(Prepared according to 91/155/EEC)**

| **1.0** | **Identification of the Substance / Preparation and of the company / undertaking** | |
|---|---|---|
| 1.1 | Product Name | Paint Marker Ink |
| 1.2 | Intended use | Marking ink for use in writing instruments |

| **2.0** | **Composition / Information On Ingredients** | | | | | |
|---|---|---|---|---|---|---|
| | Contains: | EINECS | CAS | Conc'n % | Symbols | R-phrases |
| | Ethanol ( Ethyl Alcohol) | 200-578-6 | 64-17-5 | 40 to 50% | F, Xi | R11 |
| | Pigments, Resins, Release Agents, Surfactants* | N/A | N/A | 50 to 60% | | |
| | | | | | | |

*Note: The complete text of risk –R- phrases can be found in Section 15 and 16*
**The chemical nature of these ingredients is dependant upon colour.*

| **3.0** | **Hazards Identification** | |
|---|---|---|
| 3.1 | Preparation Classification | This preparation is dangerous under 67/548/EEC and 1999/45/EC regulations as amended.<br>This preparation requires a Safety Data Sheet in accordance with 91/155/EC as amended.<br>Additional information relating to health and environmental hazards can be found in Sections 11 and 12 of this Safety Data Sheet. |
| 3.2 | Danger Symbols: | **F, Xn** |
| 3.3 | Phrases –R– | **R11 R20/22** |
| 3.4 | Danger Identification | HIGHLY FLAMMABLE. RISK OF SERIOUS DAMAGE TO EYES. VAPOURS MAY CAUSE DROWSINESS AND DIZZINESS. HARMFUL IF SWALLOWED. |

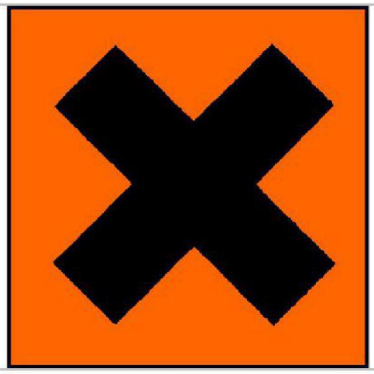
| 4.0 | First Aid Measures | | |
|---|---|---|---|
| | **Route** | **Effect** | **First Aid** |
| 4.1 | Skin Contact | Will degrease skin - can cause irritation | Remove any contaminated clothing. Wash with soap & flowing water for 15 minutes. If irritation continues consult a physician. |
| 4.2 | Eye Contact | May cause damage | Irrigate with a suitable eye solution or water for ten minutes - obtain medical attention. |
| 4.3 | Inhalation | Narcotic avoid inhalation | Remove from exposure - in severe cases obtain medical attention. |
| 4.4 | Ingestion | Harmful | Give plenty to drink if ingestion is suspected. DO NOT induce vomiting and consult a physician. |
| **5.0** | **Fire-Fighting Measures** | | |
| 5.1 | Hazard | Low Flash Point - 13°C (Closed Cup)<br>Explosive Limits : Lower Limit 3.3% to 19% Upper Limit. | |
| 5.1 | Extinguishing Media | Alcohol resistant foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.<br>Water may not be effective initially. | |
| 5.2 | Media to avoid | | |
| 5.3 | Hazardous Combustion Products | Carbon Monoxide (CO) can form with incomplete combustion.<br>Some Oxides of Nitrogen ($NO_X$) and Sulphur ($SO_X$) could be formed. Complete combustion will yield primarily Carbon Dioxide ($CO_2$) and Water. | |
| 5.4 | Protective Equipment | Fire fighters should wear proper protective equipment and self-contained breathing apparatus with full face-piece | |
| 5.5 | Additional Information | Vapours may flow along surfaces to distant ignition sources and flash back. Closed containers exposed to heat may explode.<br>Move exposed containers from fire area if it can be done without risk. Use water to keep fire-exposed containers cool. | |
| **6.0** | **Accidental Release Measures** | | |
| 6.1 | Personal Precautions | Avoid contact with skin and eyes. Ventilate contaminated area thoroughly. Do not breathe vapour. Extinguish naked flames. Remove ignition sources. No smoking. Avoid sparks. Evacuate the area of all non-essential personnel. Shut off leaks, if possible without personal risk. | |
| 6.2 | Environmental Precautions | Prevent contamination of soil and water. Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers. | |
| 6.3 | Method of Clean Up | Absorb or contain liquid with sand, earth or spill control material. Collect avoiding possible spark ignition and place in a labelled, sealable container for subsequent safe disposal. Put leaking containers in a labelled drum. Solvent is miscible with water. Flush contaminated area with plenty of water. Retain washings as contaminated waste.<br>Refer to Sections 8.0 and 13.0 for additional information on Exposure and Disposal. | |
| **7.0** | **Handling and Storage** | | |
| 7.1 | Handling | Product is not intended nor should be allowed to maintain prolonged skin contact.<br>Ensure good ventilation or the provision of local exhaust ventilation where possible.<br>Avoid contact with eyes, skin and clothing, avoid ingestion and inhalation.<br>Avoid sources of Ignition. | |
| 7.2 | Storage | Keep away from direct sunlight and other sources of heat or ignition. Do not smoke in storage areas. Keep container tightly closed and in a well-ventilated place. | |
| 7.3 | Product Transfer | Low flash point requires attention to equipment used in transport and use so as to avoid sparks and other sources of ignition.<br>Take precautionary measures against static discharges.<br>Earth all equipment. Avoid splash filling. | |

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|---|---|---|
| | | Do not empty into drains. |

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| **8.0** | **Exposure Controls / Personal Protection** | | |
| 8.1 | Exposure Limit Values | Methanol | 8hour TWA 200ppm (266mg/m3) UK<br>STEL (15 mins) 250ppm (333mg/m3) UK |
| | | Ethanol | 8hour TWA 1000ppm (1920mg/m3) UK |
| 8.2 | Personal Protection | | |
| | Respiratory Protection | Avoid inhalation of the vapours when the product in being used.<br>Local exhaust ventilation (LEV) should be used in conjunction with other control measures as a means of removing material incidentally released.<br>Type approved RPE for organic vapours if required. | |
| | Hand Protection | Protective Butyl gloves | |
| | Eye Protection | Safety goggles or face shield | |
| | Skin Protection | Overalls and anti static safety shoes | |
| | Additional | Do not permit smoking whilst product is used.<br>**Keep away from children.** | |
| 8.3 | Environmental Exposure | See Section 12 for detailed information | |
| **9.0** | **Physical and Chemical Properties** | | |
| | Odour | Characteristic Odour of Ethanol | |
| | Appearance | Coloured Liquid | |
| | Volatility | Approx 80% Volatile Solvents | |
| | pH | 6.0 to 7.0 | |
| | Boiling Point / Range | 78°C | |
| | Flash Point | 13°C | |
| | Auto-ignition | 363°C | |
| | Explosive Properties | This preparation is not considered explosive.<br>It will form explosive Vapour / Air Mixtures. | |
| | Explosive Limits : | Lower Limit 3.3% to 19% Upper Limit.<br>(Volume % in Air) | |
| | Oxidising Properties | N/A | |
| | Vapour Pressure | 5.81 kPa at 20°C and approximately 30 kPa at 50°C | |
| | Relative Density | 0.89 – 1.16 | |
| | Solubility | Water Solubility – Solvents Miscible with Water | |
| | Partition Coefficient | | |
| | Viscosity | 14 – 30 cP | |
| | Vapour Density | Relative density of the vapour (Air = 1.0) = 1.6 (ethanol) | |
| | Evaporation Rate (Bu Ac =1) | 3.4 | |
| **10.0** | **Stability and Reactivity** | | |
| 10.1 | Conditions to Avoid | Considered a Stable Product. | |
| 10.2 | Materials to Avoid | Reacts with strong oxidants causing fire and explosion hazards.<br>Can also react with acid chlorides, acid anhydrides, aluminium and copper. It may attack some forms of plastic and rubber. | |
| 10.3 | Hazardous Decomposition | May give of irritant / toxic fumes if involved in a fire. Primarily forms oxides of carbon during combustion. | |

| 11.0 | Toxicological Information | |
|---|---|---|
| 11.1 | Acute Effects | |
| | Vapour inhalation | Ataxia, Confusion, Dizziness, Drowsiness, Headache, Nausea, Weakness |
| | Skin | De-fatting of Skin. Dry Skin<br>Note that dermal absorption of solvents could also contribute substantially to the total body burden. |
| | Eyes | Lacrimation, Redness, Pain, Blurred Vision |
| | Ingestion | Abdominal Pain, Sore Throat, Drowsiness, Headache, Nausea |
| 11.2 | Target Organ Effects | The preparation may cause Liver & Kidney damage if abused. |
| 11.3 | Sensitisation | Allergic skin reaction / dermatitis could occur with misuse of this preparation. |
| **12.0** | **Ecological Information** | |
| 12.1 | Ecotoxicity | Ethanol<br>Exhibits low acute toxicity to aquatic species and is not expected to bioaccumaulte.<br>Rainbow Trout – LC50 11200mg/l (24H)<br>Daphnia – EC50 >9000mg/l (48hrs)<br><br>Methanol<br>Rainbow Trout – LC50 8000mg/l (48H) |
| 12.2 | Mobility | Mobile liquid. Contains approx 80% volatile components.<br>Solvents readily absorbed into soil.<br>Non volatile content only slightly soluble in water.<br>Pigments vary in solubility and some leaching into soil may occur from the non volatile fraction. |
| 12.3 | Persistance and Degradability | Solvents are readily biodegradable. |
| 12.4 | Bioaccumulative Potential | Ethanol<br>It will partition to water and is unlikely to bio-concentrate in aquatic organisms.<br><br>Polymer Dye<br>Insoluble in water |
| 12.5 | Other Adverse Effects | |

| 13.0 | Disposal Considerations | |
|---|---|---|
| | | Dispose of spilled material and containers in accordance with State and Local regulations for hazardous or 'Special' waste. Consider recycling or incineration. State or Local regulations are complex and subject to change so should be consulted by the owner of the waste prior to disposal. |
| **14.0** | **Transport Information** | |
| | UN No: | 1993 |
| | Proper Shipping Name: | Flammable Liquid n.o.s (Contains Ethanol) |
| | ADR, IATA, IMDG Hazard Class | 3 |
| | Packing Group | 2 |

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| **15** | **Regulatory Information** | | |
| 15.1 | Hazard Symbols | **F** | **Xi** |
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| | | **HIGHLY FLAMMABLE** | **HARMFUL** |
| 15.2 | -R-phrases | | |
| | R11 | HIGHLY FLAMMABLE | |
| | R20/22 | HARMFUL BY INHALATION AND IF SWALLOWED | |
| | | | |
| 15.3 | -S-Phrases | | |
| | S(2) | KEEP OUT OF THE REACH OF CHILDREN | |
| | S7 | KEEP CONTAINER TIGHTLY CLOSED | |
| | S16 | KEEP AWAY FROM SOURCES OF IGNITION – NO SMOKING | |
| | S36/37 | WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE / FACE PROTECTION | |
| | S45 | IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL SEEK MEDICAL ADVICE IMMEDIATELY (SHOW LABEL WHERE POSSIBLE) | |
| | | | |
| | | | |
| 15.4 | Contains | Ethanol | |
| | | | |

| **16** | **Other information** |
|---|---|
| 16.1 | -R-Phrases |
| | R23/24/25 TOXIC BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED |
| | R39/23/24/25 TOXIC: DANGER OF VERY SERIOUS IRREVERSIBLE EFFECTS THROUGH INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED |
| | R68/20/21/22 HARMFUL: POSSIBLE RISK OF IRREVERSIBLE EFFECTS THROUGH INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED |
| 16.2 | Select Bibliography<br>Regulation 67/548/EEC<br>Regulation 91/155/CE<br>Regulation 1999/45/CE<br>Regulation 2001/58/CE<br>Regulation 2001/59/CE<br>Regulation 2001/60/CE |

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|---|---|---|
| 16.3 | | |
| 16.4 | | |
| 16.5 | | |
| 16.6 | HS Tariff No: | 321590 10 |
| 16.7 | The information contained herein does not constitute the user's own assessment of workplace risk as required by other health and safety legislation. The above information is provided in good faith and is based on our present knowledge. It shall not constitute a guarantee for any specific product feature and shall not establish a legally valid contractual arrangement. | |