



MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Identification of the preparation HP ElectroInk® Mark 3.1 Black
MPS-2131-42

Use of the preparation For use with HP Indigo Press series 1000&2000

Manufacturer information Hewlett Packard Company
Limburglaan 5
6221 SH Maastricht, The Netherlands

Hewlett-Packard health effects line

(Toll-free within the US) 1-800-457-4209
(Direct) 1-503-494-7199

General information telephone number

HP Customer Care Line 1-800-474-6836
(Toll-free) 1-800-474-6836
(Direct) 1-208-323-2551

Date prepared Oct 31, 2006

MSDS number 190593

2. COMPOSITION / INFORMATION ON INGREDIENTS

| Component/substance | CAS number | % by weight |
|-----------------------|------------|-------------|
| Petroleum hydrocarbon | 90622-58-5 | < 80 |
| Carbon black | 1333-86-4 | < 5 |

Composition comments Carbon black is present only in a bound form in this preparation.

This product has been evaluated using criteria specified in 29 CFR 1910.1200 (Hazard Communication Standard).

3. HAZARDS IDENTIFICATION

Emergency overview Contact with skin and eyes may result in irritation.

Acute health effects Any potential hazards are presumed to be due to exposure to the components.

Skin contact

Petroleum hydrocarbon
Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

Eye contact

Petroleum hydrocarbon
Slightly irritating but does not injure eye tissue. Direct contact with the eye may cause discomfort and redness.

Inhalation

As a paste, the risk for lung damage is unlikely.

Petroleum hydrocarbon
Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Ingestion

Petroleum hydrocarbon
Small amounts of this product, if aspirated into the lungs, may cause mild to severe pulmonary injury.

Potential health effects

Routes of exposure Potential routes of exposure to this product are skin and eye contact, ingestion and inhalation.



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| | |
|-------------------------------|--|
| Chronic health effects | Prolonged or repeated skin contact may cause skin irritation or allergic skin sensitization reaction. |
| Carcinogenicity | Carbon black is classified by the IARC as a Group 2B carcinogen (the substance is possibly carcinogenic to humans). Carbon black in this preparation, due to its bound form, does not present this carcinogenic risk. None of the other ingredients in this preparation are classified as carcinogens according to ACGIH, EU, IARC, MAK, NTP or OSHA. |

4. FIRST AID MEASURES

First aid procedures

| | |
|-------------------|---|
| Skin | Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists. |
| Eye | Do not rub eyes. Immediately flush with large amounts of clean, warm water (low pressure) for at least 15 minutes or until particles are removed. If irritation persists get medical attention. Do not apply neutralizing agents. |
| Inhalation | If overcome by vapor, remove person from exposure to fresh air. If breathing is difficult, give oxygen. If symptoms persist, get medical attention. |
| Ingestion | Do not induce vomiting. Never give anything by mouth to an unconscious person. If ingestion of a large amount does occur, seek medical attention. |

5. FIRE FIGHTING MEASURES

| | |
|---|---|
| Flash point and method | > 64 °C (based on petroleum hydrocarbon); Pensky-Martens Closed Cup |
| Auto ignition temperature | > 200 °C (based on petroleum hydrocarbon) |
| Hazardous combustion products | Refer to section 10. |
| Extinguishing media | Suitable extinguishing media: Dry chemical, CO ₂ , water spray or regular foam. |
| Unsuitable extinguishing media | None known. |
| Fire fighting equipment/instructions | Move containers from fire area if you can do it without risk. Evacuate area and fight fire from a safe distance. |

6. ACCIDENTAL RELEASE MEASURES

| | |
|--|--|
| Personal precautions | Wear appropriate personal protective equipment. |
| Environmental precautions | Do not let product enter drains. Do not flush into surface water or sanitary sewer system. |
| Procedures if material is released or spilled | Soak up with inert absorbent material. Slowly vacuum or sweep the material into a bag or other sealed container. Dispose of in compliance with federal, state, and local regulations. See also section 13 Disposal considerations. |
| Evacuation procedures | In case of large spills, follow all facility emergency response procedures. |

7. HANDLING AND STORAGE

| | |
|-----------------|--|
| Handling | Avoid prolonged or repeated skin contact with this material. Avoid contact with skin, eyes and clothing. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. |
| Storage | Keep away from excessive heat or cold. Store in a cool and shaded area. Do not store in direct sunlight. |



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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values Manufacturer recommended exposure limit based on petroleum hydrocarbon at > 75%. TWA = 171ppm (1200 mg/m³).

OSHA - Final PELs - Time Weighted Averages (TWAs)

Carbon black 1333-86-4 3.5 mg/m³ TWA

ACGIH - Threshold Limits Values - Time Weighted Averages (TLV-TWA)

Carbon black 1333-86-4 3.5 mg/m³ TWA

Personal protective equipment

General Use personal protective equipment to minimize exposure to skin and eye.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

Exposure guidelines Use in a well ventilated area.

9. PHYSICAL & CHEMICAL PROPERTIES

Boiling point 188 °C (based on petroleum hydrocarbon)

Specific gravity 0.856 g/mL

VOC content 630 g/L

Flash point > 64 °C (based on petroleum hydrocarbon)

Appearance Paste

Odor mild hydrocarbon-like

Oxidizing properties Not applicable

Color black

10. CHEMICAL STABILITY & REACTIVITY INFORMATION

Stability Stable under recommended storage conditions.

Hazardous polymerization Will not occur.

Hazardous decomposition products Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Incompatibility This product may react with strong oxidizing agents.

11. TOXICOLOGICAL INFORMATION

The ink formulation has not been tested.

Refer to Section 3 for potential health effects and Section 4 for first aid measures.

Carcinogenicity Carbon black is classified as a carcinogen by the IARC (possibly carcinogenic to humans, Group 2B) and by the State of California under Proposition 65. In their evaluations of carbon black, both organizations indicate that exposure to carbon black, per se, does not occur when it remains bound within a product matrix, specifically, rubber, ink, or paint. Carbon black is present only in a bound form in this preparation.

OSHA - Hazard Communication Carcinogens

Carbon black 1333-86-4 Present

Symptoms and target organs

NIOSH - Pocket Guide - Target Organs

Carbon black 1333-86-4 respiratory system, eyes (lymphatic cancer in presence of PAHs)



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12. ECOLOGICAL INFORMATION

Aquatic toxicity This product has not been tested for ecological effects.

13. DISPOSAL CONSIDERATIONS

Disposal instructions Dispose of in compliance with federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

General Not a regulated article under United States DOT, IATA, ADR, IMDG, or RID.

IATA

| | |
|-----------------------------------|----------------|
| Proper shipping name | Not applicable |
| Hazard class | Not applicable |
| Packaging exceptions | none |
| Identification number (UN) | none |
| Packing group | none |

15. REGULATORY INFORMATION

International regulations All chemical substances in this HP product have been notified or are exempt from notification under chemical substances notification laws in the following countries: US (TSCA), EU (EINECS/ELINCS), Switzerland, Canada (DSL/NDSL), Australia, Japan, Philippines, South Korea, New Zealand, and China.

US federal regulations US EPA TSCA Inventory: All chemical substances in this product comply with all rules or orders under TSCA.

US TSCA 12(b): Does not contain listed chemicals.

HMIS ratings

| | |
|------------------|---|
| Health: | 1 |
| Flammability: | 2 |
| Physical hazard: | 0 |

NFPA ratings

| | |
|---------------|---|
| Health: | 1 |
| Flammability: | 2 |
| Instability: | 0 |

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Hazard categories Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

16. OTHER INFORMATION

Other information This MSDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200).

Issue date Oct 31 2006 11:48AM

Revision 4



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Replaces sheet dated

Aug 1 2006 5:16PM

Disclaimer

This Safety Data Sheet document is provided without charge to customers of Hewlett-Packard Company. Data is the most current known to Hewlett-Packard Company at the time of preparation of this document and is believed to be accurate. It should not be construed as guaranteeing specific properties of the products as described or suitability for a particular application. This document was prepared to the requirements of the jurisdiction specified in Section 1 above and may not meet regulatory requirements in other countries.

MSDS sections updated

2. Composition / Information on Ingredients: Composition comments
3. Hazards Identification: Chronic health effects
3. Hazards Identification: Carcinogenicity
11. Toxicological Information: Carcinogenicity

Explanation of abbreviations

| | |
|---------------|---|
| ACGIH | American Conference of Governmental Industrial Hygienists |
| CAS | Chemical Abstracts Service |
| CERCLA | Comprehensive Environmental Response Compensation and Liability Act |
| CFR | Code of Federal Regulations |
| COC | Cleveland Open Cup |
| DOT | Department of Transportation |
| EPCRA | Emergency Planning and Community Right-to-Know Act (aka SARA) |
| IARC | International Agency for Research on Cancer |
| NIOSH | National Institute for Occupational Safety and Health |
| NTP | National Toxicology Program |
| OSHA | Occupational Safety and Health Administration |
| PEL | Permissible Exposure Limit |
| RCRA | Resource Conservation and Recovery Act |
| REC | Recommended |
| REL | Recommended Exposure Limit |
| SARA | Superfund Amendments and Reauthorization Act of 1986 |
| STEL | Short-Term Exposure Limit |
| TCLP | Toxicity Characteristics Leaching Procedure |
| TLV | Threshold Limit Value |
| TSCA | Toxic Substances Control Act |
| VOC | Volatile Organic Compounds |