



# MATERIAL SAFETY DATA SHEET

## 1. Chemical product and company identification

<b>Important information</b>	*** This Safety Data Sheet is only authorised for use by HP for HP Original products. Any unauthorised use of this Safety Data Sheet is strictly prohibited and may result in legal action being taken by HP. ***
<b>A. Product name</b>	MLT-R116
<b>Other means of identification</b>	Not available.
<b>B. Recommended use and Limitations on use</b>	
<b>Recommended use</b>	This product is an imaging drum that is used in LaserJet MFP M436n, LaserJet MFP M436nda series printers.
<b>C. Supplier information</b>	
	HP Korea House 23-6 Yoido-dong Youngdeungpo-gu Seoul 150-742, Korea
<b>Telephone</b>	(02) 2199-0114
<b>HP Inc. health effects line</b>	
(Toll-free within the US)	1-800-457-4209
(Direct)	1-760-710-0048
<b>HP Inc. Customer Care Line</b>	
(Toll-free within the US)	1-800-474-6836
(Direct)	1-208-323-2551
<b>Email:</b>	hpcustomer.inquiries@hp.com

## 2. Hazards identification

<b>A. Hazard category/Classification</b>	
<b>Physical hazards</b>	Not classified.
<b>Health hazards</b>	Not classified.
<b>Environmental hazards</b>	Not classified.
<b>B. Warning label items including precautionary statement</b>	
• <b>Pictogram</b>	None.
• <b>Signal word</b>	None.
• <b>Hazard statement</b>	None.
• <b>Precautionary statement</b>	None.
<b>C. Other hazards not included in the hazard category criteria (e.g. dust explosion hazard)</b>	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.
<b>Supplemental information</b>	None.

## 3. Composition/information on ingredients

Chemical identity	Common and alternative names	CAS number	ID number	Content in percent (%)
Ceramic materials		66402-68-4	KE-05377	<95
Polyester resin	Polyester resin	Trade Secret		<10
Coating materials		Trade Secret		<3
Black Pigment		Proprietary	Proprietary	<1

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#### 4. First aid measures

<b>A. In case of eye contact</b>	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, consult a physician.
<b>B. In case of skin contact</b>	Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.
<b>C. In case of inhalation</b>	Move person to fresh air immediately. If irritation persists, consult a physician.
<b>D. In case of swallowing</b>	Rinse mouth with water. Drink one to two glasses of water. If symptoms occur, consult a physician.
<b>E. Note to physician</b>	Not available.
<b>Most important symptoms/effects, acute and delayed</b>	Difficulty in breathing. Coughing.

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#### 5. Fire-fighting measures

<b>A. Suitable (and unsuitable) extinguishing media</b>	
<b>Suitable extinguishing media</b>	CO <sub>2</sub> , water, or dry chemical
<b>Unsuitable extinguishing media</b>	None known.
<b>B. Specific hazards arising from the chemical (example: hazardous combustion products)</b>	Like most organic material in powder form, toner can form explosive dust-air mixtures when finely dispersed in air.
<b>C. Specific methods of fire-fighting</b>	
<b>Special protective equipment for firefighters</b>	Wear self-contained breathing apparatus and protective clothing. Wear full set of protective equipment including chemical goggles and gloves.
<b>Special fire fighting procedures</b>	If fire occurs in the printer, treat as an electrical fire.
<b>Specific methods</b>	None established.

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#### 6. Accidental release measures

<b>A. Personal precautions, protective equipment and emergency measures</b>	Avoid inhalation of dust. Wash thoroughly after dealing with a spillage. See Section 8 of the MSDS for Personal Protective Equipment. Ensure adequate ventilation.
<b>B. Environmental precautions</b>	Not available.
<b>C. Methods and materials for containment and cleaning up</b>	Slowly vacuum or sweep the material into a bag or other sealed container. Clean remainder with a damp cloth or vacuum cleaner. If a vacuum is used, the motor must be rated as dust explosion-proof. Fine powder can form explosive dust-air mixtures. Dispose of in compliance with federal, state, and local regulations.

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#### 7. Handling and storage

<b>A. Precautions for safe handling</b>	Keep out of the reach of children. Avoid inhalation of dust and contact with skin and eyes. Use with adequate ventilation. Keep away from excessive heat, sparks, and open flames.
<b>B. Conditions for safe storage (including any incompatibilities)</b>	Keep out of the reach of children. Keep tightly closed and dry. Store at room temperature. Store away from strong oxidizers.

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#### 8. Exposure controls/personal protection

##### A. Exposure limit values, biological limit values, etc

##### Korea. OELs. Standards for Exposure to Chemical Substances and Physically Hazardous Factors

Components	Type	Value	
Black Pigment	TWA	3.5 mg/m <sup>3</sup>	

  

Components	Type	Value	Form
Black Pigment	TWA	3 mg/m <sup>3</sup>	Inhalable fraction.

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**B. Appropriate engineering controls** Use in a well ventilated area.

##### C. Personal protective equipment

- **Respiratory protection** No personal respiratory protective equipment required under normal conditions of use.
  - **Eye protection** Wear safety glasses with side shields (or goggles).
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- **Hand protection** Rubber gloves are recommended. Wash hands after handling.
- **Body protection** Protection suit must be worn.

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## 9. Physical and chemical properties

<b>A. Appearance</b>	Fine powder
<b>Physical state</b>	Solid.
<b>Form</b>	solid
<b>Color</b>	Black.
<b>B. Odor</b>	Odorless
<b>C. Odor threshold</b>	Not available.
<b>D. pH</b>	Not applicable
<b>E. Melting point/freezing point</b>	Not available.
<b>F. Boiling point, initial boiling point, and boiling range</b>	Not applicable
<b>G. Flash point</b>	Not applicable
<b>H. Evaporation rate</b>	Not available.
<b>I. Flammability (solid, gas)</b>	Not available.
<b>J. Upper/lower limit on flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not flammable
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>K. Vapor pressure</b>	Not applicable
<b>L. Solubility</b>	
<b>Solubility (water)</b>	Not available.
<b>M. Vapor density</b>	Not applicable
<b>N. Specific gravity</b>	4.4 g/ml
<b>O. n-octanol/water partition coefficient</b>	Not available.
<b>P. Auto-ignition temperature</b>	No data available
<b>Q. Decomposition temperature</b>	> 392 °F (> 200 °C)
<b>R. Viscosity</b>	Not applicable
<b>S. Molecular weight</b>	Not available.
<b>Other data</b>	
<b>Oxidizing properties</b>	No information available.
<b>Percent volatile</b>	0 %

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## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
<b>A. Stability and hazardous reaction potential</b>	
<b>Stability</b>	Stable under normal storage conditions.
<b>Hazardous reaction potential</b>	Will occur.
<b>B. Conditions to avoid (e.g. static discharge, shock or vibration, etc)</b>	Heat, sparks, flames. Sunlight. Avoid dust close to ignition sources.
<b>C. Incompatible materials</b>	Strong oxidizers, Strong acids.
<b>D. Hazardous decomposition products</b>	Carbon monoxide and carbon dioxide.

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## 11. Toxicological information

<b>A. Information on likely routes of exposure</b>	
• <b>Respiratory organs</b>	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
• <b>Skin</b>	Contact with skin may result in mild irritation.
• <b>Eyes</b>	Contact with eyes may result in mild irritation.

- **Mouth** Ingestion is not a likely route of exposure.

## B. Information on health hazards

- **Acute toxicity (list all possible routes of exposure)** Based on available data, the classification criteria are not met. LD50/oral/rat >5000 mg/kg

Components	Species	Test Results
Black Pigment		
<u>Acute</u>		
<b>Oral</b>		
LD50	Rat	> 10000 mg/kg
Ceramic materials (CAS 66402-68-4)		
<u>Acute</u>		
<b>Dermal</b>		
LD50	Rabbit	> 2500 mg/kg
<b>Inhalation</b>		
LC50	Rat	> 2.3 mg/l, 4 Hours > 0.888 mg/l
<b>Oral</b>		
LD50	Rat	> 2000 mg/kg
• <b>Corrosivity or irritation to the skin</b>	Based on available data, the classification criteria are not met. Not irritant in rabbit (OECD 404)	
• <b>Serious eye damage/eye irritation</b>	Based on available data, the classification criteria are not met. Not irritant in rabbit (OECD 405)	
• <b>Respiratory sensitization</b>	Based on available data, the classification criteria are not met.	
• <b>Skin sensitization</b>	Based on available data, the classification criteria are not met.	
• <b>Carcinogenic properties /Carcinogenicity</b>	Based on available data, the classification criteria are not met.  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.	
• <b>Mutagenic properties /Mutagenicity</b>	Negative, does not indicate mutagenic potential (Ames Test: Salmonella typhimurium) Based on available data, the classification criteria are not met.	
• <b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.	
• <b>Specific target organ toxicity - single exposure</b>	Based on available data, the classification criteria are not met.	
• <b>Specific target organ toxicity - repeated exposure</b>	Based on available data, the classification criteria are not met.	
• <b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.	

## 12. Ecological information

- A. **Ecotoxicity** Not available.

Components	Species	Test Results
Ceramic materials (CAS 66402-68-4)		
<b>Aquatic</b>		
<i>Acute</i>		
Algae	ErC50	Algae 184.6 mg/l, 72 h
Crustacea	EC50	Invertebrates (Invertebrates) 1.9 mg/l, 48 h
Fish	LC50	Fish 457 mg/l, 96 h
<i>Chronic</i>		
Fish	EC50	Fish 0.151 mg/l, 7 d
	LC50	Fish 1.94 mg/l, 16 d

- B. **Persistence/degradability** Not available.

- C. **Bioaccumulative potential** Not available.

- D. **Mobility in soil** Not available.

E. Other adverse effects Not available.

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### 13. Disposal considerations

- A. Method of disposal** Dispose of in compliance with federal, state, and local regulations. Do not shred toner cartridge, unless dust-explosion prevention measures are taken. Do not put toner container into fire; heated toner may cause severe burns. Do not incinerate. Do not allow this material to drain into sewers/water supplies.
- HP's Planet Partners (trademark) supplies recycling program enables simple, convenient recycling of HP original inkjet and LaserJet supplies. For more information and to determine if this service is available in your location, please visit <http://www.hp.com/recycle>.
- B. Disposal considerations (including disposal of contaminated containers or packaging)** Not available.
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### 14. Transport information

**DOT**

Not regulated as dangerous goods.

**IATA**

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.

**ADR**

Not regulated as dangerous goods.

**Further information** Not a dangerous good under DOT, IATA, ADR, IMDG, or RID.

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### 15. Regulatory information

**A. Restrictions under the Industrial Safety and Health Law**

**Harmful Substances Prohibited from Manufacturing**

Not regulated.

**Harmful Substances Requiring Permission for Manufacture or Use**

Not regulated.

**Controlled Hazardous Substances**

Not regulated.

**Harmful Substances Requiring Special Medical Examination**

Not regulated.

**Workplace Environmental Monitoring Harmful Materials**

Not regulated.

**Occupational Exposure Limit**

Not regulated.

**B. Restrictions under the Chemicals Control Law (Previously Toxic Chemicals Control Law)**

**Accidental Release Prevention Substances**

Not regulated.

**Act on the Registration and Evaluation of Chemicals**

**Banned Toxic Chemicals**

Not regulated.

**Designated Existing Chemicals Subject to Registration (PEC) (MoE No. 2015-92)**

Not listed.

**Restricted Chemical Substances**

Not regulated.

**Toxic Chemicals**

Not regulated.

**C. Restrictions under the Dangerous Substance Safety Management Act**

**D. Restrictions under the Wastes Control Act**

**Halogenated Materials in Waste Organic Solvents**

Not regulated.

**Hazardous Substances**

Not regulated.

## E. Restrictions under other foreign or domestic laws

### Clean Air Conservation Act

#### Air Pollutants

Not regulated.

#### Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides (Rules on PIC, MoE No. 2014-252, Dec. 31, 2014; Standards for Pesticides, RDA No. 2014-26), as amended

Not listed.

#### Specific Air Pollutants

Not regulated.

**Regulatory information** The components of this product are reported in the following inventories: China.

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## 16. Other information

<b>A. Source of information</b>	Not available.
<b>B. Issue date</b>	02-May-2020
<b>C. Number of revisions and date of most recent revision</b>	Not applicable.
<b>D. Other</b>	Not available.
<b>Disclaimer</b>	This [Material] Safety Data Sheet 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 (M)SDS 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.

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<b>Revision information</b>	1. Product and Company Identification: Alternate Trade Names Chemical product and company identification: Important information
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### Explanation of abbreviations

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