



# CHEMICAL PRODUCT SAFETY DATA SHEET

Prepared in accordance with GB/T 16483 and GB/T 17519

Product name: ML-D3470Series

Issue date: 01-Jun-2018

Revision date: 21-Oct-2020

Version #: 05

SDS No: -

## SECTION 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>Chinese name of chemical</b>                                     | ML-D3470Series  |
| <b>English name of chemical</b>                                     | <b>ML-D3470Series</b>   |
| <b>Company identification</b>                                       | China HP Co., Ltd.<br>5F, Block A, Bldg 1, #8<br>Guangshun Avenue South, Chaoyang district<br>Beijing, China<br>Zip code: 100102  |
| <b>Telephone</b>  | (+86) 10 5870 4833  |
| <b>Chemical Emergency<br/>Advisory Service Hotline</b>              | 400-626-7911  |
| <b>HP Inc. health effects line<br/>(Toll-free within the US)</b>    | 1-800-457-4209  |
| <b>(Direct)</b>   | 1-760-710-0048  |
| <b>HP Inc. Customer Care<br/>Line<br/>(Toll-free within the US)</b> | 1-800-474-6836  |
| <b>(Direct)</b>   | 1-208-323-2551  |
| <b>Email:</b>   | hpcustomer.inquiries@hp.com   |

### Recommended use and Limitations on use

|                        |   |
|------------------------|---|
| <b>Recommended use</b> | This product is a toner mixture that is used in printing systems. |
| <b>Issue date</b>      | 01-Jun-2018   |
| <b>Revision date</b>   | 21-Oct-2020   |
| <b>Supersedes date</b> | 26-Sep-2019   |

## SECTION 2 Hazards identification

### GHS hazard categories

Not classified.

### Label elements

|                                |       |
|--------------------------------|-------|
| <b>Pictograms</b>              | None. |
| <b>Signal word</b>             | None. |
| <b>Hazard statement</b>        | None. |
| <b>Precautionary statement</b> |       |
| <b>Prevention</b>              | None. |
| <b>Response</b>                | None. |
| <b>Storage</b>                 | None. |
| <b>Disposal</b>                | None. |

### Other hazards

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.

Supplemental information None.

**SECTION 3 Composition/information on ingredients**

Substance/mixture Mixture

| Chemical name           | Concentration (%) | CAS Number   |
|-------------------------|-------------------|--------------|
| 聚酯树脂<br>Polyester resin | <90%              | Trade Secret |
| 黑色颜料<br>Black Pigment   | <5%               | Proprietary  |
| 硅石<br>Silica            | <5%               | Trade Secret |
| 蜡<br>Wax                | <5%               | Trade Secret |

**SECTION 4 First aid measures**

|   |  |
|---|--|
| <b>Inhalation</b>                                   | Move person to fresh air immediately. If irritation persists, consult a physician.   |
| <b>Skin contact</b>                                 | Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.   |
| <b>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>Ingestion</b>                                    | Rinse mouth with water. Drink one to two glasses of water. DO NOT induce vomiting. Get medical attention immediately.  |
| <b>Most important symptoms and health effects</b>   | Difficulty in breathing. Coughing.   |
| <b>Personal protection for first-aid responders</b> | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.   |
| <b>Notes to physician</b>                           | Treat symptomatically.   |

**SECTION 5 Fire-fighting measures**

|   |   |
|---|---|
| <b>Extinguishing media</b>              | Dry chemical, foam, carbon dioxide, water fog.  |
| <b>Extinguishing media to avoid</b>     | Do not use water jet as an extinguisher, as this will spread the fire.                          |
| <b>Specific hazards</b>                 | During fire, gases hazardous to health may be formed.   |
| <b>Special fire fighting procedures</b> | Move containers from fire area if you can do so without risk.                                   |
| <b>Protection of fire-fighters</b>      | Firefighters should wear full protective clothing including self contained breathing apparatus. |
| <b>General fire hazards</b>             | No unusual fire or explosion hazards noted.   |
| <b>Specific methods</b>                 | Use standard firefighting procedures and consider the hazards of other involved materials.      |

**SECTION 6 Accidental release measures****Personal precautions, protective equipment and emergency procedures**

|  |   |
|--|---|
| <b>For non-emergency personnel</b>                             | Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. See Section 8 of the SDS for Personal Protective Equipment.  |
| <b>For emergency responders</b>                                | Not available.  |
| <b>Environmental precautions</b>                               | Avoid discharge into drains, water courses or onto the ground.  |
| <b>Clean-up methods and materials and containment measures</b> | Avoid the generation of dusts during clean-up. Use explosion proof electric equipment. Collect dust using a vacuum cleaner equipped with HEPA filter. The product is immiscible with water and will spread on the water surface. Stop the flow of material, if this is without risk. Sweep up or vacuum up spillage and collect in suitable container for disposal. |
| <b>Prevention of secondary hazards</b>                         | Not available.  |

**SECTION 7 Handling and storage**

|                 |   |
|-----------------|---|
| <b>Handling</b> | Minimize dust generation and accumulation. Use local exhaust ventilation. Avoid prolonged exposure. Practice good housekeeping.                   |
| <b>Storage</b>  | Store in tightly closed original container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). |

**SECTION 8 Exposure controls/personal protection****Exposure limits**

China OELs. Occupational Exposure Limits for Hazardous Agents in the Workplace, Chemical Hazardous Agents (GBZ 2.1-2007)

| Components    | Type   | Value               | Form        |
|---------------|--------|---------------------|-------------|
| Black Pigment | PC-TWA | 4 mg/m <sup>3</sup> | Total dust. |

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Exposure guidelines**

5 mg/m<sup>3</sup> (Respirable Fraction) 3 mg/m<sup>3</sup> (Respirable Particulate)

**Monitoring methods**

Not available.

**Engineering measures**

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits.

**Personal protective equipment****Respiratory protection**

No personal respiratory protective equipment required under normal conditions of use.

**Hand protection**

Rubber gloves are recommended. Wash hands after handling.

**Eye protection**

Wear safety glasses with side shields (or goggles).

**Skin and body protection**

Protection suit must be worn.

**Hygiene measures**

Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and immediately after handling the product.

**SECTION 9 Physical and chemical properties****Appearance****Physical state**

Not available.

**Form**

Solid. Fine powder

**Color**

Black.

**Odor**

Odorless

**pH**

Not available.

**Melting point/freezing point**

Not available.

**Boiling point, initial boiling point, and boiling range**

Not available.

**Flash point**

Not available.

**Flammability limit - lower (%)**

Not available.

**Flammability limit - upper (%)**

Not available.

**Explosive limit - lower (%)**

Not available.

**Explosive limit - upper (%)**

Not available.

**Vapor pressure**

Not available.

**Vapor density**

Not available.

**Solubility(ies)****Solubility (water)**

Insoluble in water.

**Solubility (other)**

Partially soluble in toluene, chloroform and tetrahydrofuran

**Partition coefficient (n-octanol/water)**

Not available.

**Auto-ignition temperature**

Not available.

**Decomposition temperature**

> 392 °F (> 200 °C)

**Other data****Oxidizing properties**

No information available.

**SECTION 10 Stability and reactivity****Reactivity**

The product is stable and non-reactive under normal conditions of use, storage and transport.

|   |  |
|---|--|
| <b>Stability</b>                          | Stable under normal storage conditions.  |
| <b>Possibility of hazardous reactions</b> | No dangerous reaction known under conditions of normal use.                                      |
| <b>Conditions to avoid</b>                | Avoid temperatures exceeding the decomposition temperature. Contact with incompatible materials. |
| <b>Incompatible materials</b>             | This product may react with strong oxidizing agents.   |
| <b>Hazardous decomposition products</b>   | Carbon monoxide and carbon dioxide.  |

## SECTION 11 Toxicological information

|                       |   |
|-----------------------|---|
| <b>Acute toxicity</b> | Based on available data, the classification criteria are not met.<br>LD50/oral/rat >5000 mg/kg. |
|-----------------------|---|

| Components                               | Species   | Test Results  |
|--|---|---------------|
| Black Pigment                            |   |               |
| <b>Acute</b>                             |   |               |
| <b>Oral</b>                              |   |               |
| LD50                                     | Rat   | > 10000 mg/kg |
| <b>Routes of exposure</b>                | Not available.  |               |
| <b>Skin corrosion/irritation</b>         | Based on available data, the classification criteria are not met.<br>Not a known irritant. (OECD 404).                          |               |
| <b>Serious eye damage/eye irritation</b> | Based on available data, the classification criteria are not met.<br>Not a known irritant. (OECD 405).                          |               |
| <b>Respiratory or skin sensitization</b> |   |               |
| <b>Respiratory sensitization</b>         | Not a respiratory sensitizer.   |               |
| <b>Skin sensitizer</b>                   | This product is not expected to cause skin sensitization.   |               |
| <b>Germ cell mutagenicity</b>            | Based on available data, the classification criteria are not met.<br>Negative Ames Test (Test strains: Salmonella typhimurium). |               |
| <b>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.

### China OELs for hazardous agents in the workplace: Carcinogen Category

Black Pigment (CAS Proprietary) Possible human carcinogen.

### IARC Monographs. Overall Evaluation of Carcinogenicity

Black Pigment (CAS Proprietary) 2B Possibly carcinogenic to humans.

|   |  |
|---|--|
| <b>Toxic to reproduction</b>                                      | This product is not expected to cause reproductive or developmental effects. |
| <b>Specific target organ toxicity following single exposure</b>   | Based on available data, the classification criteria are not met.            |
| <b>Specific target organ toxicity following 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.            |
| <b>Chronic effects</b>  | Not available.   |

**Other information**

Complete toxicity data are not available for this specific formulation  
Refer to Section 2 for potential health effects and Section 4 for first aid measures.

In a study in rats (H.Muhle) by chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of the rats in the concentration(16mg/m3) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animals in the middle (4mg/m3) exposure group. But no pulmonary changes was reported in the lowest (1mg/m3) exposure group, the most relevant level to potential human exposures.

In 1996, the IARC reevaluated carbon black as a GROUP 2B carcinogen (possible human carcinogen). This evaluation is given to carbon black for which there is inadequate human evidence, but sufficient animal evidence. The latter is based upon the developer of lung tumors in rat receiving chronic inhalation exposures to free carbon black at level that induce particle overload of the lung. Studies performed in animal models other than rats have not demonstrated an association between carbon black and lung tumors. Moreover, a two-year cancer bioassay using a typical toner preparation containing carbon black demonstrated no association between toner exposure and tumor development in rats.

**SECTION 12 Ecological information**

|                                      |  |
|--------------------------------------|--|
| <b>Ecotoxicity</b>                   | The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. |
| <b>Persistence and degradability</b> | No data is available on the degradability of any ingredients in the mixture.   |
| <b>Bioaccumulation</b>               | Not available.   |
| <b>Mobility in soil</b>              | Not available.   |
| <b>Other hazardous effects</b>       | Not available.   |

**SECTION 13 Disposal considerations**

|                                   |   |
|-----------------------------------|---|
| <b>Residual waste</b>             | Not available.  |
| <b>Contaminated packaging</b>     | Not available.  |
| <b>Local disposal regulations</b> | 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>.

**SECTION 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.

**SECTION 15 Regulatory information****Law of the People's Republic of China on Prevention and Control of Occupational Diseases**

Not regulated.

**Regulations on the Control over Safety of Dangerous Chemicals**

Not regulated.

**Regulatory information**

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.

**Stockholm Convention**

Not applicable.

**Rotterdam Convention**

Not applicable.

**Montreal Protocol**

Not applicable.

**Kyoto protocol**

Not applicable.

**Basel Convention**

Not applicable.

**SECTION 16 Other information****References**

Not available.

**Disclaimer**

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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  |