SAFETY DATA SHEET

1. Identification

Product identifier: W9050MM
Other means of identification: None.
Recommended use: This product is a black toner preparation that is used in HP Color LaserJet Managed MFP E87640, HP Color LaserJet Managed MFP E87650, HP Color LaserJet Managed MFP E87660 series printers.
Recommended restrictions: None known.
Manufacturer/Importer/Supplier/Distributor information:
HP Inc.
1501 Page Mill Road
Palo Alto, CA 94304-1112
United States
Telephone: 650-857-5020
HP Inc. health effects line (Toll-free within the US): 1-800-457-4209
(Toll-free within the US): 1-760-710-0048
HP Inc. Customer Care Line (Direct): 1-800-474-6836
(Direct): 1-208-323-2551
Email: hpcustomer.inquiries@hp.com

2. Hazard(s) identification

Physical hazards: Not classified.
Health hazards: Not classified.
Environmental hazards: Not classified.
OSHA defined hazards: Not classified.

Label elements
Hazard symbol: None.
Signal word: None.
Hazard statement: Not available.
Precautionary statement
Prevention: Not available.
Response: Not available.
Storage: Not available.
Disposal: Not available.

Hazard(s) not otherwise classified (HNOC)
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. Titanium dioxide is classified by IARC as a Group 2B carcinogen, meaning there is inadequate evidence in humans for the carcinogenicity of titanium dioxide, but there is sufficient evidence in experimental animals for the carcinogenicity of titanium dioxide. Titanium dioxide 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
This product is not classified as hazardous according to OSHA CFR 1910.1200 (HazCom 2012).

3. Composition/information on ingredients

Mixtures

Material name: W9050MM
Version #: 03
Revision date: 12-Feb-2019
Issue date: 04-Dec-2018
### Chemicals and Ingredients

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyester resin</td>
<td>Polyester resin</td>
<td>Trade Secret</td>
<td>&lt;95%</td>
</tr>
<tr>
<td>Carbon black</td>
<td></td>
<td>1333-86-4</td>
<td>&lt;10%</td>
</tr>
<tr>
<td>Paraffin waxes and Hydrocarbon waxes</td>
<td></td>
<td>Trade Secret</td>
<td>&lt;7.5%</td>
</tr>
<tr>
<td>Amorphous Silica</td>
<td></td>
<td>Trade Secret</td>
<td>&lt;5%</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td></td>
<td>13463-67-7</td>
<td>&lt;1.5%</td>
</tr>
</tbody>
</table>

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

### 4. First-aid measures

#### Inhalation
Move person to fresh air immediately. If irritation persists, consult a physician.

#### Skin contact
Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.

#### Eye contact
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.

#### Ingestion
Rinse mouth with water. Drink one to two glasses of water. DO NOT induce vomiting. Get medical attention immediately.

Most important symptoms/effects, acute and delayed:
Difficulty in breathing. Coughing.

### 5. Fire-fighting measures

#### Suitable extinguishing media
ABC powder, foam and water. Alcohol resistant foam.

#### Unsuitable extinguishing media
Do not use water jet.

#### Specific hazards arising from the chemical
Like most organic material in powder form, toner can form explosive dust-air mixtures when finely dispersed in air.

#### Special protective equipment and precautions for firefighters
Wear self-contained breathing apparatus and protective clothing. Wear full set of protective equipment including chemical goggles and gloves.

#### Fire fighting equipment/instructions
If fire occurs in the printer, treat as an electrical fire.

#### Specific methods
None established.

### 6. Accidental release measures

##### Personal precautions, protective equipment and emergency procedures
Avoid inhalation of dust. Wash thoroughly after dealing with a spillage. See Section 8 of the SDS for Personal Protective Equipment. Ensure adequate ventilation. Remove victim immediately from source of exposure. Emergency personnel should wear self-contained breathing apparatus.

##### Methods and materials for containment and cleaning up
Dispose of in compliance with federal, state, and local regulations. 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.

##### Environmental precautions
Avoid spreading dust or contaminated materials. Avoid discharge into drains, water courses or onto the ground.

### 7. Handling and storage

#### Precautions for safe handling
Use local exhaust ventilation. Take precautionary measures against static discharges. Use only in well-ventilated areas. Ground and bond containers when transferring material. Avoid inhalation of dust and contact with skin and eyes. Keep away from excessive heat, sparks, and open flames.

#### Conditions for safe storage, including any incompatibilities
Keep out of the reach of children. Wash hands after handling. When using, do not eat, drink or smoke. Remove contaminated clothing and wash the skin thoroughly with soap and water after work. Keep tightly closed and dry. Store at room temperature.

### 8. Exposure controls/personal protection

#### Occupational exposure limits
This mixture has no ingredients that have PEL, TLV, or other recommended exposure limit.

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black (CAS 1333-86-4)</td>
<td>PEL</td>
<td>3.5 mg/m3</td>
<td></td>
</tr>
</tbody>
</table>
US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>PEL</td>
<td>15 mg/m³</td>
<td>Total dust.</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black (CAS 1333-86-4)</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td>Paraffin waxes and Hydrocarbon waxes</td>
<td>TWA</td>
<td>2 mg/m³</td>
<td>Fume.</td>
</tr>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black (CAS 1333-86-4)</td>
<td>TWA</td>
<td>0.1 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Paraffin waxes and Hydrocarbon waxes</td>
<td>TWA</td>
<td>2 mg/m³</td>
<td>Fume.</td>
</tr>
</tbody>
</table>

Biological limit values

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

Exposure guidelines

USA OSHA (TWA/PEL): 15 mg/m³ (Total Dust) 5 mg/m³ (Respirable Fraction)

ACGIH (TWA/TLV): 10 mg/m³ (Inhalable Particulate) 3 mg/m³ (Respirable Particulate)

Appropriate engineering controls

Use in a well ventilated area.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses with side shields (or goggles).

Skin protection
Hand protection
Rubber gloves are recommended. Wash hands after handling.

Other
Protection suit must be worn.

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

Thermal hazards
Not available.

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

9. Physical and chemical properties

Appearance
Fine powder

Physical state
Solid.

Form
solid

Color
Black.

Odor
Odorless

Odor threshold
No information available

pH
Not applicable

Melting point/freezing point
Not information available

Initial boiling point and boiling range
Not applicable

Flash point
Not applicable

Evaporation rate
Not available.

Flammability (solid, gas)
Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)
Not flammable

Flammability limit - upper (%)
Not available.

Explosive limit - lower (%)
Not available.
Explosive limit - upper (%) | Not available.
---|---
Vapor pressure | Not applicable
Vapor density | Not applicable
Solubility(ies) | 
Solubility (water) | Insoluble in water. Partially soluble in toluene, chloroform and tetrahydrofurane
Partition coefficient (n-octanol/water) | Not available.
Auto-ignition temperature | No data available
Decomposition temperature | Not available.
Viscosity | Not applicable
Other information | 
Oxidizing properties | No information available.
Percent volatile | 0 % estimated
Specific gravity | 1.2 g/ml

10. Stability and reactivity

Reactivity | Not available.
Chemical stability | Stable under normal storage conditions.
Possibility of hazardous reactions | Not available.
Conditions to avoid | Risk of dust explosion. Shocks and physical damage.
Incompatible materials | Not known.
Hazardous decomposition products | Not available.

11. Toxicological information

Information on likely routes of exposure

Inhalation | Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
Skin contact | Contact with skin may result in mild irritation.
Eye contact | Contact with eyes may result in mild irritation.
Ingestion | Ingestion is not a likely route of exposure.

Symptoms related to the physical, chemical and toxicological characteristics | Not available.

Information on toxicological effects

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

Components | Species | Test Results
Carbon black (CAS 1333-86-4) | 
Acute | 
Oral | Rat | > 10000 mg/kg
LD50 | 
Skin corrosion/irritation | Based on available data, the classification criteria are not met. Not a known irritant. (OECD 404)
Serious eye damage/eye irritation | Based on available data, the classification criteria are not met. Not a known irritant. (OECD 405)
Respiratory or skin sensitization | 
Respiratory sensitization | Based on available data, the classification criteria are not met.
Skin sensitization | Based on available data, the classification criteria are not met.
Germ cell mutagenicity | Negative, does not indicate mutagenic potential (Ames Test: Salmonella typhimurium)
| Based on available data, the classification criteria are not met.
Carcinogenicity

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. Titanium dioxide is classified by the IARC as a Group 2B carcinogen (the substance is possibly carcinogenic to humans). The IARC classification was based on high concentrations of titanium dioxide particles in animal lungs. Under intended use of this toner product, exposure to titanium dioxide is much lower.

IARC Monographs. Overall Evaluation of Carcinogenicity

Carbon black (CAS 1333-86-4) 2B Possibly carcinogenic to humans.
Titanium dioxide (CAS 13463-67-7) 2B Possibly carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity

Based on available data, the classification criteria are not met.

Specific target organ toxicity - single exposure

Based on available data, the classification criteria are not met.

Specific target organ toxicity - repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

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.

Further information

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.

12. Ecological information

Ecotoxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Not available.

Other adverse effects

Not available.

13. Disposal considerations

Disposal instructions

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.

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.
15. Regulatory information

US federal regulations

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

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
No

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
Not regulated.

US state regulations

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance
CARBON BLACK (AIRBORNE, UNBOUND PARTICLES OF RESPIRABLE SIZE [<= 10 MICROMETERS]) (CAS 1333-86-4)
Listed: February 21, 2003

TITANIUM DIOXIDE (AIRBORNE, UNBOUND PARTICLES OF RESPIRABLE SIZE) (CAS 13463-67-7)
Listed: September 2, 2011

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))
Carbon black (CAS 1333-86-4)
Titanium dioxide (CAS 13463-67-7)

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.

16. Other information, including date of preparation or last revision

Issue date 04-Dec-2018
Revision date 12-Feb-2019
Version # 03

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

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.

This safety data sheet is meant to convey information about HP inks (toners) provided in HP Original ink (toner) supplies. If our Safety Data Sheet has been provided to you with a refilled, remanufactured, compatible or other non-HP Original supply please be aware that the information contained herein was not meant to convey information about such products and there could be considerable differences from information in this document and the safety information for the product you purchased. Please contact the seller of the refilled, remanufactured or compatible supplies for applicable information, including information on personal protective equipment, exposure risks and safe handling guidance. HP does not accept refilled, remanufactured or compatible supplies in our recycling programs.

Revision information


Composition / Information on Ingredients: Ingredients

Explanation of abbreviations

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