



SAFETY DATA SHEET

1. Identification

Important information	*** 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. ***
Name of the substance or mixture (trade name)	HP Z9M05A Black Developer
Major recommended uses for the substance or mixture	This product is a toner preparation that is used in HP LaserJet Managed MFP E72525, HP LaserJet Managed MFP E72530, HP LaserJet Managed MFP E72535 series printers.
Specific restrictions for use of the substance or mixture	Not available.
Manufacturer/Importer/Distributor information	
Company identification	HP Colombia SAS Carrera 7 No 99-53 Torre B Pisos 7 Bogota, Colombia
Telephone	(57) 1 639 0000
HP Inc. health effects line	
(Toll-free within the US)	1-800-457-4209
(Direct)	1-760-710-0048
HP Inc. Customer Care Line	
(Toll-free within the US)	1-800-474-6836
(Direct)	1-208-323-2551
Email:	hpcustomer.inquiries@hp.com

2. Hazards identification

Classification of the substance or mixture	
Physical hazards	Not classified.
Health hazards	Not classified.
Environmental hazards	Not classified.
GHS labeling elements, including precautionary statements	
Hazard symbol(s)	None.
Signal word	None.
Hazard statement(s)	Not available.
Precautionary statement(s)	
Prevention	Not available.
Response	Not available.
Storage	Not available.
Disposal	Not available.
Other hazards which do not result in classification	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	None.

3. Composition/information on ingredients

Mixture

Common chemical name or technical name	CAS number	Concentration or concentration range
Ceramic Materials And Wares, Chemicals	Trade Secret	<95%
Styrene acrylate copolymer	Proprietary	<10%
Amorphous silica	Proprietary	<1%
Black Pigment	Proprietary	<1%
Paraffin waxes and Hydrocarbon waxes	Trade Secret	<1%
Titanium dioxide	13463-67-7	<0.1%

4. First-aid measures

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. If symptoms occur, consult a physician.
Most important symptoms/effects, acute and delayed	Difficulty in breathing. Coughing.
Notes to physician	Not available.

5. Fire-fighting measures

Means of fire extinguishing

Suitable extinguishing media	Water spray, dry chemical, carbon dioxide.
Unsuitable extinguishing media	None known.
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 fire fighting procedures	If fire occurs in the printer, treat as an electrical fire.
Protective measures taken by firefighting crews	Wear self-contained breathing apparatus and protective clothing. Wear full set of protective equipment including chemical goggles and gloves.
Specific methods	None established.

6. Control measures for spills and leaks

Personal precautions, protective equipment and emergency procedures

To be taken by those who are not involved in rendering emergency services	Avoid inhalation of dust. Wash thoroughly after dealing with a spillage. See Section 8 of the SDS for Personal Protective Equipment. Ensure adequate ventilation.
To be taken by those who are involved in rendering emergency services	Not available.
Environmental precautions	Avoid spreading dust or contaminated materials. Avoid discharge into drains, water courses or onto the ground.
Methods and materials for containment and cleaning up	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.

7. Handling and storage

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

8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Black Pigment	TWA	3 mg/m3	Inhalable fraction.
Paraffin waxes and Hydrocarbon waxes	TWA	2 mg/m3	Fume.
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Colombia. OELs. Resolution No. 02400: Norms Concerning Working Conditions, Health and Safety in the Workplace

Components	Type	Value	Form
Black Pigment	TWA	3 mg/m3	Inhalable fraction.
Paraffin waxes and Hydrocarbon waxes	TWA	2 mg/m3	Fume.
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Ecuador. OELs (INEN 2266:2013, 2013-01 2nd rev.: Transport, storage and handling of hazardous materials. Requirements. 1st ed., 1/29, 2013)

Components	Type	Value	Form
Black Pigment	TWA	3 mg/m3	Inhalable fraction.
Paraffin waxes and Hydrocarbon waxes	TWA	2 mg/m3	Fume.
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Paraguay. Decree No. 14.390/92 that approves the General Technical Regulation of Safety, Hygiene and Medicine in the Workplace

Components	Type	Value	Form
Black Pigment	TWA	3 mg/m3	Inhalable fraction.
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Peru. OELs. Decreto Supremo 015-2005-SA (Reglamento sobre Valores Límites Permisibles para Agentes Químicos en el Ambiente de Trabajo)

Components	Type	Value	Form
Black Pigment	TWA	3.5 mg/m3	
Paraffin waxes and Hydrocarbon waxes	TWA	2 mg/m3	Fume.
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Venezuela. OELs. (COVENIN 2253: Permissible Environmental Concentration Limits for Chemical Substances in Workplaces and Biological Exposure Indices)

Components	Type	Value	Form
Paraffin waxes and Hydrocarbon waxes	TWA	2 mg/m3	Fume.
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Biological limit values

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

Exposure guidelines

5 mg/m3 (Respirable Fraction) 3 mg/m3 (Respirable Particulate)

Appropriate engineering controls

Use in a well ventilated area.

Personal protective measures

Eyes and 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.
Hygiene measures	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	No information available
Initial boiling point and boiling temperature 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	> 392 °F (> 200 °C)
Viscosity	Not applicable
Other physical and chemical parameters	
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	Stable
Conditions to avoid	Heat, sparks, flames. Sunlight. Avoid dust close to ignition sources.
Incompatible materials	This product may react with strong oxidizing agents. This product may react with strong acids.
Hazardous decomposition products	Carbon monoxide and carbon dioxide. Hydrogen.

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

Components	Species	Test Results
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Black Pigment

Acute

Oral

LD50	Rat	> 10000 mg/kg
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Ceramic Materials And Wares, Chemicals

Acute

Dermal

LD50	Rabbit	> 2500 mg/kg
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Inhalation

LC50	Rat	> 2.3 mg/l, 4 Hours
		> 0.888 mg/l

Oral

LD50	Rat	> 2000 mg/kg
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Skin irritation and corrosion 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.

ACGIH Carcinogens

Black Pigment (CAS Proprietary)	A3 Confirmed animal carcinogen with unknown relevance to humans.
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Titanium dioxide (CAS 13463-67-7)	A4 Not classifiable as a human carcinogen.
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Colombia. OELs. Resolution No. 02400: Norms Concerning Working Conditions, Health and Safety in the Workplace

Black Pigment (CAS Proprietary)	A3 Animal carcinogen.
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Titanium dioxide (CAS 13463-67-7)	A4 Not classifiable as a human carcinogen.
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Ecuador. OELs (INEN 2266:2013, 2013-01 2nd rev.: Transport, storage and handling of hazardous materials. Requirements. 1st ed., 1/29, 2013)

Black Pigment (CAS Proprietary)	Group A3 Confirmed animal carcinogen with unknown relevance to humans.
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Titanium dioxide (CAS 13463-67-7)	Group A4 Not classifiable as a human carcinogen.
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IARC Monographs. Overall Evaluation of Carcinogenicity

Black Pigment (CAS Proprietary)	2B Possibly carcinogenic to humans.
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Titanium dioxide (CAS 13463-67-7)	2B Possibly carcinogenic to humans.
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Paraguay. Decree No. 14.390/92 that approves the General Technical Regulation of Safety, Hygiene and Medicine in the Workplace

Black Pigment (CAS Proprietary)	A3 Confirmed animal carcinogen with unknown relevance to humans.
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Titanium dioxide (CAS 13463-67-7)	A4 Not classifiable as a human carcinogen.
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Toxic to reproduction 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	Based on available data, the classification criteria are not met.
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.

12. Ecological information

Ecotoxicity Not available.

Components	Species	Test Results
Ceramic Materials And Wares, Chemicals		
Aquatic		
<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
Persistence and degradability	Not available.	
Bioaccumulative potential		
Partition coefficient n-octanol / water (log Kow)	Not available.	
Bioconcentration factor (BCF)	Not available.	
Mobility in soil	Not available.	
Other adverse effects	This product has not been tested for ecological effects.	

13. Considerations on final disposal

Recommended methods for final destination

Residual waste Not available.

Contaminated packaging Not available.

Local disposal regulations 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

Federal regulations

Colombia. Controlled Substances (Resolution No. 009 of 1987 nationally regulating the transport & use of substances in subparag. f) of article 20 of Law 30 of 1986, as amended)

Not listed.

Venezuela. Chemical Precursors (Official Gazette No. 34.741, List I & II)

Not regulated.

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.

Montreal Protocol

Not applicable.

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Basel Convention

Not applicable.

16. Other information

Significant information, yet not specifically related to the previous sections Not available.

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.

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