



SAFETY DATA SHEET

1. Identification

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|--|---|
| 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 Z7Y68A Black Developer |
| Major recommended uses for the substance or mixture | HP Developer |
| 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 | Proprietary | <95% |
| Polyester resin Polyester resin | Proprietary | <10% |
| Amorphous silica | Proprietary | <1% |
| Black Pigment | Proprietary | <1% |
| Titanium dioxide | 13463-67-7 | <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. DO NOT induce vomiting. Get medical attention immediately. |
| 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 | 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 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. Remove victim immediately from source of exposure. Emergency personnel should wear self-contained breathing apparatus. |
| 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

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.

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

Control parameters

Occupational exposure limits

US. ACGIH Threshold Limit Values

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

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

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

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/m ³ | Inhalable fraction. |
| Titanium dioxide (CAS 13463-67-7) | TWA | 10 mg/m ³ | |

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/m ³ | Inhalable fraction. |
| Titanium dioxide (CAS 13463-67-7) | TWA | 10 mg/m ³ | |

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

| Components | Type | Value |
|-----------------------------------|------|-----------------------|
| Black Pigment | TWA | 3.5 mg/m ³ |
| Titanium dioxide (CAS 13463-67-7) | TWA | 10 mg/m ³ |

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

| Components | Type | Value |
|-----------------------------------|------|----------------------|
| Titanium dioxide (CAS 13463-67-7) | TWA | 10 mg/m ³ |

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 | Not available. |
| 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

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|---|---|
| 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 | No information available. |
| Hazardous decomposition products | Not known. |

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 |
|--|---|-------------------------------------|
| Black Pigment | | |
| Acute | | |
| Oral | | |
| LD50 | Rat | > 10000 mg/kg |
| Ceramic Materials And Wares, Chemicals | | |
| Acute | | |
| Dermal | | |
| LD50 | Rabbit | > 2500 mg/kg |
| Inhalation | | |
| LC50 | Rat | > 2.3 mg/l, 4 Hours > 0.888 mg/l |
| Oral | | |
| LD50 | Rat | > 2000 mg/kg |
| 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. | |
| Titanium dioxide (CAS 13463-67-7) | A4 Not classifiable as a human carcinogen. | |
| Colombia. OELs. Resolution No. 02400: Norms Concerning Working Conditions, Health and Safety in the Workplace | | |
| Black Pigment (CAS Proprietary) | A3 Animal carcinogen. | |
| Titanium dioxide (CAS 13463-67-7) | A4 Not classifiable as a human carcinogen. | |
| 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. | |
| Titanium dioxide (CAS 13463-67-7) | Group A4 Not classifiable as a human carcinogen. | |
| IARC Monographs. Overall Evaluation of Carcinogenicity | | |
| Black Pigment (CAS Proprietary) | 2B Possibly carcinogenic to humans. | |
| Titanium dioxide (CAS 13463-67-7) | 2B Possibly carcinogenic to humans. | |
| 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. | |
| Titanium dioxide (CAS 13463-67-7) | A4 Not classifiable as a human carcinogen. | |
| 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

Acute

| | | | |
|-----------|-------|-------------------------------|------------------|
| 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 |

Chronic

| | | | |
|------|------|------|-----------------|
| 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.

Revision information

1. Product and Company Identification: Alternate Trade Names

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 |