



SAFETY DATA SHEET

1. Identification

Name of the substance or mixture (trade name) HP Z9M02A Cyan Developer

Major recommended uses for the substance or mixture This product is a cyan developer preparation that is used in HP Color LaserJet Managed MFP E77822, HP Color LaserJet Managed MFP E77825, HP Color LaserJet Managed MFP E77830 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. 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
	Ferrite	Trade Secret	<95
	Styrene-Acrylic Resin	Trade Secret	<10

Cyan Pigment	Trade Secret	<2
Paraffin wax	Trade Secret	<2
Silica Amorphous silica	Trade Secret	<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	Dry chemical, CO2, water spray or regular foam.
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.
Hazardous combustion products	Carbon monoxide and carbon dioxide.

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
Paraffin Wax	TWA	2 mg/m3	Fume.

Chile. OELs (Reg. 594/1999, arts. 61 & 66, as amended on Jan 24, 2015)

Components	Type	Value	Form
Paraffin Wax	TWA	1.6 mg/m3	Fume.
Silica	TWA	0.08 mg/m3	Respirable fraction.

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

Components	Type	Value	Form
Paraffin Wax	TWA	2 mg/m3	Fume.

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
Paraffin Wax	TWA	2 mg/m3	Fume.

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

Components	Type	Value	Form
Paraffin Wax	TWA	2 mg/m3	Fume.

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

Components	Type	Value	Form
Paraffin Wax	TWA	2 mg/m3	Fume.

Biological limit values

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

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.

Personal protective equipment

General

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

Personal protective measures

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

Cyan

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)	Not available.
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.
Specific gravity	4.4 g/ml (20C, 68F)

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
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.

IARC Monographs. Overall Evaluation of Carcinogenicity

Silica (CAS Trade Secret)

3 Not classifiable as to carcinogenicity to humans.

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

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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