



SAFETY DATA SHEET

1. Identification of the chemical and information about the manufacturer or supplier

1.1 Identification of the chemical products

1.1.1 Technical name HP Z7Y73A Yellow Developer

Other means of identification None.

1.1.2 Recommended use of the chemical and restrictions on use

Recommended use This product is a yellow developer 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.

Limitations on use None known.

1.2 Manufacturer/Importer/Supplier/Distributor information

1.2.1 Manufacturer

ZAO Hewlett-Packard A.O.
Highway Leningradskoe, House 16A, Building 3,
125171, Moscow

Telephone 7 495 797-3500

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. Hazard(s) identification

2.1. Hazard identification of chemical product as a whole (classification according to GOST 12.1.007-76 and GHS)

Classification according to GOST 12.1.007-76 Not available.

GHS classification

Physical hazards Not classified.

Health hazards Not classified.

Environmental hazards Not classified.

2.2 Labeling elements in compliance with GOST 31340-2013

2.2.1 Signal word None.

2.2.2 Symbols None.

2.2.3 Hazard statement Not available.

Precautionary statement

Prevention Not available.

Response Not available.

Storage Not available.

Disposal Not available.

Other hazards None known.

Supplemental information None.

3. Composition/information on ingredients

3.1 Information on product as a whole

3.1.1 Chemical name (IUPAC) Z7Y73A

3.1.2 Chemical formula O2Si (Trade Secret), O2Si (Trade Secret)

3.1.3 General description of the composition (taking into account the brand assortment; preparation method) Not applicable.

3.2 Components

Components	Concentration by weight (%)	Hygienic standards in the working area			CAS-No.	EC No.
		MAC, mg/m ³	TSEL, mg/m ³	Hazard classification		
Ferrite	<95				Trade Secret	-
Polyester resin	<10				Trade Secret	-
Paraffin wax	<2				Trade Secret	-
Yellow Pigment	<2				Trade Secret	-
Silica	<1	3	1	3	Trade Secret	-

4. First-aid measures

4.1. Observed symptoms

- 4.1.1 In case of exposure via inhalation** Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
- 4.1.2 In contact with skin** Contact with skin may result in mild irritation.
- 4.1.3 In contact with eyes** Contact with eyes may result in mild irritation.
- 4.1.4 In case of exposure via ingestion** Ingestion is not a likely route of exposure.

4.2 First-aid measures to be provided to victims

- 4.2.1 In case of exposure via inhalation** Move person to fresh air immediately. If irritation persists, consult a physician.
- 4.2.2 In contact with skin** Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.
- 4.2.3 In contact with eyes** 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.
- 4.2.4 In case of exposure via ingestion** Rinse mouth with water. Drink one to two glasses of water. If symptoms occur, consult a physician.
- 4.2.5 Contraindications** Not available.

5. Fire-fighting and explosion safety measures and means

- 5.1 General characteristics of fire-explosion properties** Not available.
- 5.2 Fire-explosion indicators** Not available.
- 5.3 Combustion and/or thermal destruction products and hazards arising from these** Like most organic material in powder form, toner can form explosive dust-air mixtures when finely dispersed in air.
- 5.4 Recommended extinguishing media** Dry chemical, CO₂, water spray or regular foam.
- 5.5 Forbidden extinguishing media** None known.
- 5.6 Special protective equipment for firefighters** Wear self-contained breathing apparatus and protective clothing. Wear full set of protective equipment including chemical goggles and gloves.
- 5.7 Specific extinguishing methods** None established.
- Special fire fighting procedures** If fire occurs in the printer, treat as an electrical fire.

6. Accident and emergency prevention and response measures and their consequences

6.1 Measures to prevent harmful effects on people, environment, buildings, constructions, etc. in case of accidents and emergencies

- 6.1.1 General required actions in case of an accident or emergency** Avoid inhalation of dust. Wash thoroughly after dealing with a spillage. See Section 8 of the SDS for Personal Protective Equipment. Ensure adequate ventilation.

6.1.2 Personal protection equipment in case of the accident Not available.

6.2 Procedures for the elimination of accidents and emergencies

6.2.1 Procedures in case of leaks, spills, splashes Not available.

6.2.2 Actions in case of fire Not available.

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.

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

7. Storage and handling requirements of chemicals during loading and unloading

7.1 Safety precautions when handling chemical products

7.1.1 Technical safety measures Not available.

7.1.2 Environmental protection measures Not available.

7.1.3 Recommended safe handling and transportation advice Avoid inhalation of dust and contact with skin and eyes. Use with adequate ventilation. Wash thoroughly after handling. Keep away from excessive heat, sparks, and open flames.

7.2 Chemical storage requirements

7.2.1 Terms and conditions for safe storage Not available.

7.2.2 Packaging Not available.

7.3 Safety measures and storage requirements at domestic use Keep out of the reach of children. Keep tightly closed and dry. Store at room temperature. Store away from strong oxidizers.

8. Equipment for monitoring exposure and personal protective equipment

8.1 Parameters of the working area that require monitoring No exposure limits noted for ingredient(s).

Occupational exposure limits

Russian Federation. Hygiene Norm GN 2.2.5.1313-03. Executive No. 76 of 30 April 2003. Maximum allowable concentration (MAC) of harmful substances in the air of working zones, as amended.

Components	Type	Value	Form
Silica	Ceiling	3 mg/m ³	Aerosol.
	TWA	1 mg/m ³	Aerosol.

8.2 Measures to ensure the content of harmful substances in the working area below the exposure level concentration Not available.

Appropriate engineering controls Use in a well ventilated area.

8.3 Worker personal protective equipment

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

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

8.3.3 Protective equipment

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

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

Other Protection suit must be worn.

Thermal hazards Not available.

8.3.4 Personal protection equipment in case of domestic use Not applicable.

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

9.1 Physical appearance	Fine powder
Physical state	Solid.
Form	solid
Color	Yellow
Odor	Odorless
Odor threshold	No information available

9.2 Parameters characterizing basic properties of the product

pH	Not applicable
Melting point/freezing point	No information available
Initial boiling point and boiling range	Not applicable
Flash point	Not applicable
Auto-ignition temperature	No data available
Decomposition temperature	> 392 °F (> 200 °C)
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not flammable
Flammability limit - upper (%)	Not available.
Vapor pressure	Not applicable
Vapor density	Not applicable
Viscosity	Not applicable
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Other data	
Oxidizing properties	No information available.
Specific gravity	4.4 g/ml (20C, 68F)
Other information	Not available.

10. Stability and reactivity

10.1 Chemical stability	Stable under normal storage conditions.
Hazardous decomposition products	Carbon monoxide and carbon dioxide. Hydrogen.
10.2 Reactivity	Not available.
10.3 Conditions to avoid	Heat, sparks, flames. Sunlight. Avoid dust close to ignition sources.
Possibility of hazardous reactions	Stable
Incompatible materials	This product may react with strong oxidizing agents. This product may react with strong acids.

11. Toxicological information

11.1 General exposure characteristics	Not available.
11.2 Routes of exposure	Not available.
11.3 Affected/target organs, tissues and systems of humans	
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.
11.4 Information on health hazards in case of direct exposure to the product and its effect	
Effect on upper respiratory tract irritation	Not available.
Respiratory or skin sensitization	

Hygiene Norm GN 2.2.5.1313-03. Executive No. 76 of 30 April 2003. Maximum allowable concentration (MAC) of harmful substances in the air of working zones, as amended.

Not listed.

Respiratory sensitization	Based on available data, the classification criteria are not met.
Skin sensitization	Based on available data, the classification criteria are not met.
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)
Aspiration hazard	Based on available data, the classification criteria are not met.

11.5 Information on long-term hazardous health effects

Carcinogenicity	Based on available data, the classification criteria are not met.
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IARC Monographs. Overall Evaluation of Carcinogenicity

Silica (CAS Trade Secret) 3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity	Based on available data, the classification criteria are not met.
Mutagenicity	Negative, does not indicate mutagenic potential (Ames Test: Salmonella typhimurium) Based on available data, the classification criteria are not met.
Cumulativeness	Not available.
Chronic effects	Not available.

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

Further 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. Environmental impact information

12.1 General description of the impact on the environment Not available.

12.2 Routes of exposure to environment Not available.

12.3 The most important characteristics of the environmental impact

12.3.1 Hygienic standards Not available.

12.3.2 Ecotoxicity Not available.

12.3.3 Biomigration and transformation of the environment due to the biodegradation or other processes

Persistence and degradability Not available.

Bioaccumulative potential Not available.

Mobility in soil Not available.

Other adverse effects Not available.

13. Recommendations for waste (residues) disposal

13.1 Safety precautions when handling the waste generated during use, storage, transportation 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>.

13.2 Information on the location and disposal methods, recycling or disposal of product waste, including packaging Not available.

13.3 Recommendation on the waste disposal generated during its domestic use Not available.

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. National and international regulatory information

15.1 National legislation

15.1.1 Laws of the Russian Federation Not available.

15.1.2 Information about the documentation, regulatory requirements for the protection of human health and environment

Sanitary-Epidemiological Rules, 1.2.2353-08, Chemical substances, mixtures and products which are carcinogenic factors, 21 April 2008

Not listed.

Hygiene Norm GN 2.2.5.1313-03. Executive No. 76 of 30 April 2003. Maximum allowable concentration (MAC) of harmful substances in the air of working zones, as amended.

Silica (CAS Trade Secret)

Aerosol with fibrogenic action.

Midrange hazardous.

15.2 International Conventions and Agreements

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.

16. Other information

16.1 Information on revision of the SDS

Issue date 22-Apr-2017

Revision date 04-Aug-2018

Version # 02

Previous SDS number Not applicable.

Revision information Fire-fighting and explosion safety measures and means: 5.3 Combustion and/or thermal destruction products and hazards arising from these
Accident and emergency prevention and response measures and their consequences: 6.2.1 Procedures in case of leaks, spills, splashes
Accident and emergency prevention and response measures and their consequences: Methods and materials for containment and cleaning up
Toxicological information: Further information
National and international regulatory information: 15.2 International Conventions and Agreements
Other information: Disclaimer

16.2 List of references used in compiling the safety data sheet 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