



MATERIAL SAFETY DATA SHEET

1. Chemical product and company identification

A. Product name	CLT-Y816Series
B. Recommended use and Limitations on use	
Recommended use	This product is a toner mixture that is used in printing systems.
Limitations on use	Do not use with non compatible printer.
C. Supplier information	
	HP Korea House 23-6 Yoido-dong Youngdeungpo-gu Seoul 150-742, Korea
Telephone	(02) 2199-0114
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

A. Hazard category/Classification	
Physical hazards	Not classified.
Health hazards	Not classified.
Environmental hazards	Not classified.
B. Warning label items including precautionary statement	
• Pictogram	None.
• Signal word	None.
• Hazard statement	None.
• Precautionary statement	None.
C. Other hazards not included in the hazard category criteria (e.g. dust explosion hazard)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Chemical identity	Common and alternative names	CAS number	ID number	Content in percent (%)
Paraffin waxes and Hydrocarbon waxes		8002-74-2	KE-27782	<10
Titanium dioxide		13463-67-7	KE-33900	<2.5

4. First aid measures

A. In case of 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.
B. In case of skin contact	Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.
C. In case of inhalation	Move person to fresh air immediately. If irritation persists, consult a physician.
D. In case of swallowing	Rinse mouth with water. Drink one to two glasses of water. DO NOT induce vomiting. Get medical attention immediately.
E. Note to physician	Treat symptomatically.
General advice	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

A. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media Dry chemical, foam, carbon dioxide, water fog.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

B. Specific hazards arising from the chemical (example: hazardous combustion products) During fire, gases hazardous to health may be formed.

C. Specific methods of fire-fighting

Special protective equipment for firefighters Firefighters should wear full protective clothing including self contained breathing apparatus.

Special fire fighting procedures Move containers from fire area if you can do so without risk.

General fire hazards No unusual fire or explosion hazards noted.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

A. Personal precautions, protective equipment and emergency measures Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. See Section 8 of the MSDS for Personal Protective Equipment.

B. Environmental precautions Avoid discharge into drains, water courses or onto the ground.

C. Methods and materials for containment and cleaning up Avoid the generation of dusts during clean-up. Use explosion proof electric equipment. Collect dust using a vacuum cleaner equipped with HEPA filter. The product is immiscible with water and will spread on the water surface. Stop the flow of material, if this is without risk. Sweep up or vacuum up spillage and collect in suitable container for disposal.

7. Handling and storage

A. Precautions for safe handling Minimize dust generation and accumulation. Use local exhaust ventilation. Avoid prolonged exposure. Practice good housekeeping.

B. Conditions for safe storage (including any incompatibilities) Store in tightly closed original container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the MSDS).

8. Exposure controls/personal protection

A. Exposure limit values, biological limit values, etc

Korea. OELs. Standards for Exposure to Chemical Substances and Physically Hazardous Factors

Components	Type	Value	Form
Paraffin waxes and Hydrocarbon waxes (CAS 8002-74-2)	TWA	2 mg/m ³	Fume.
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m ³	

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Paraffin waxes and Hydrocarbon waxes (CAS 8002-74-2)	TWA	2 mg/m ³	Fume.
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m ³	

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

B. Appropriate engineering controls Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits.

C. Personal protective equipment

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

• **Eye protection** Wear safety glasses with side shields (or goggles).

• Hand protection	Rubber gloves are recommended. Wash hands after handling.
• Body protection	Protection suit must be worn.
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

A. Appearance	
Physical state	Not available.
Form	Solid. Fine powder
Color	Yellow.
B. Odor	
	Odorless
C. Odor threshold	
	Not available.
D. pH	
	Not available.
E. Melting point/freezing point	
	Not available.
F. Boiling point, initial boiling point, and boiling range	
	Not available.
G. Flash point	
	Not available.
H. Evaporation rate	
	Not available.
I. Flammability (solid, gas)	
	Not available.
J. Upper/lower limit on flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
K. Vapor pressure	
	Not available.
L. Solubility	
Solubility (water)	Insoluble in water.
Solubility (other)	Partially soluble in toluene, chloroform and tetrahydrofuran
M. Vapor density	
	Not available.
N. Specific gravity	
	Not available.
O. n-octanol/water partition coefficient	
	Not available.
P. Auto-ignition temperature	
	Not available.
Q. Decomposition temperature	
	> 392 °F (> 200 °C)
R. Viscosity	
	Not available.
S. Molecular weight	
	Not available.
Other data	
Oxidizing properties	No information available.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
A. Stability and hazardous reaction potential	
Stability	Stable under normal storage conditions.
Hazardous reaction potential	Not available.
B. Conditions to avoid (e.g. static discharge, shock or vibration, etc)	
	Avoid temperatures exceeding the decomposition temperature. Contact with incompatible materials.
C. Incompatible materials	
	This product may react with strong oxidizing agents.
D. Hazardous decomposition products	
	Carbon monoxide and carbon dioxide.

11. Toxicological information

A. Information on likely routes of exposure	
• Respiratory organs	Dust may irritate respiratory system. Prolonged inhalation may be harmful.

- **Skin** Dust or powder may irritate the skin.
- **Eyes** Dust may irritate the eyes.
- **Mouth** Expected to be a low ingestion hazard.

B. Information on health hazards

- **Acute toxicity (list all possible routes of exposure)** Based on available data, the classification criteria are not met. LD50/oral/rat >5000 mg/kg.
- **Corrosivity or irritation to the skin** 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 sensitization** Not a respiratory sensitizer.
- **Skin sensitization** This product is not expected to cause skin sensitization.
- **Carcinogenic properties /Carcinogenicity** Based on available data, the classification criteria are not met.

IARC Monographs. Overall Evaluation of Carcinogenicity

Titanium dioxide (CAS 13463-67-7) 2B Possibly carcinogenic to humans.

- **Mutagenic properties /Mutagenicity** Based on available data, the classification criteria are not met. Negative Ames Test (Test strains: Salmonella typhimurium).
- **Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.
- **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.

12. Ecological information

- A. Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Titanium dioxide (CAS 13463-67-7)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna) > 1000 mg/l, 48 hours
Fish	LC50	Mummichog (Fundulus heteroclitus) > 1000 mg/l, 96 hours

- B. Persistence/degradability** No data is available on the degradability of any ingredients in the mixture.
- C. Bioaccumulative potential** Not available.
- D. Mobility in soil** Not available.
- E. Other adverse effects** Not available.

13. Disposal considerations

- A. Method of disposal** 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>.

- B. Disposal considerations (including disposal of contaminated containers or packaging)** 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. Regulatory information**A. Restrictions under the Industrial Safety and Health Law****Harmful Substances Prohibited from Manufacturing**

Not regulated.

Harmful Substances Requiring Permission for Manufacture or Use

Not regulated.

Controlled Hazardous Substances

TITANIUM DIOXIDE (CAS 13463-67-7)

Harmful Substances Requiring Special Medical Examination

Not regulated.

Workplace Environmental Monitoring Harmful Materials

TITANIUM DIOXIDE (CAS 13463-67-7)

Occupational Exposure Limit

PARAFFIN WAX FUME (CAS 8002-74-2)

TITANIUM DIOXIDE (CAS 13463-67-7)

B. Restrictions under the Chemicals Control Law (Previously Toxic Chemicals Control Law)**Accidental Release Prevention Substances**

Not regulated.

Observational Chemicals

Not regulated.

C. Restrictions under the Dangerous Substance Safety Management Act**D. Restrictions under the Wastes Control Act****Halogenated Materials in Waste Organic Solvents**

Not regulated.

Hazardous Substances

Not regulated.

E. Restrictions under other foreign or domestic laws**Clean Air Conservation Act****Air Pollutants**

Not regulated.

Specific Air Pollutants

Not regulated.

Act on the Registration and Evaluation of Chemicals**Banned Toxic Chemicals**

Not regulated.

Designated Existing Chemicals Subject to Registration (PEC) (MoE No. 2015-92)

Not listed.

Restricted Chemical Substances

Not regulated.

Toxic Chemicals

Not regulated.

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

- A. Source of information** Not available.
- B. Issue date** 20-Mar-2018
- C. Number of revisions and date of most recent revision** Not applicable.
- D. Other** 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