



CHEMICAL PRODUCT SAFETY DATA SHEET

Prepared in accordance with GB/T 16483 and GB/T 17519.

Product name: MLT-R309Series

Issue date: 27-Jun-2019
Revision date: 24-Oct-2020
Version #: 02
SDS No: -

SECTION 1 Chemical product and company 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. ***
Chinese name of chemical	MLT-R309Series
English name of chemical	MLT-R309Series
Company identification	China HP Co., Ltd. 5F, Block A, Bldg 1, #8 Guangshun Avenue South, Chaoyang district Beijing, China Zip code: 100102
Telephone	(+86) 10 5870 4833
Chemical Emergency Advisory Service Hotline	400-626-7911
HP Inc. health effects line (Toll-free within the US) (Direct)	1-800-457-4209 1-760-710-0048
HP Inc. Customer Care Line (Toll-free within the US) (Direct)	1-800-474-6836 1-208-323-2551
Email:	hpcustomer.inquiries@hp.com

Recommended use and Limitations on use

Recommended use	This product is a toner mixture that is used in printing systems.
Issue date	27-Jun-2019
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SECTION 2 Hazards identification

GHS hazard categories

Not classified.

Label elements

Pictograms	None.
Signal word	None.
Hazard statement	None.
Precautionary statement	
Prevention	None.
Response	None.
Storage	None.
Disposal	None.

Other hazards 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.

SECTION 3 Composition/information on ingredients

Substance/mixture	Mixture		
Chemical name		Concentration (%)	CAS Number
陶瓷材料和商品、化学品 Ceramic Materials And Wares, Chemicals		<95%	Proprietary
苯乙烯丙烯酸树脂 Styrene acrylic resin		<10%	Proprietary
二氧化硅 Amorphous silica		<1%	Proprietary
黑色颜料 Black Pigment		<1%	Proprietary
二氧化钛 Titanium dioxide		<1%	13463-67-7

SECTION 4 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 and health effects	Difficulty in breathing. Coughing.
Personal protection for first-aid responders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
Notes to physician	Treat symptomatically.

SECTION 5 Fire-fighting measures

Extinguishing media	Dry chemical, foam, carbon dioxide, water fog.
Extinguishing media to avoid	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards	During fire, gases hazardous to health may be formed.
Special fire fighting procedures	Move containers from fire area if you can do so without risk.
Protection of fire-fighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
General fire hazards	No unusual fire or explosion hazards noted.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures	
For non-emergency personnel	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 SDS for Personal Protective Equipment.
For emergency responders	Not available.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

Clean-up methods and materials and containment measures 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.

Prevention of secondary hazards Not available.

SECTION 7 Handling and storage

Handling Minimize dust generation and accumulation. Use local exhaust ventilation. Avoid prolonged exposure. Practice good housekeeping.

Storage Store in tightly closed original container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

SECTION 8 Exposure controls/personal protection

Exposure limits

China OELs. Occupational Exposure Limits for Hazardous Agents in the Workplace, Chemical Hazardous Agents (GBZ 2.1-2007)

Components	Type	Value	Form
Black Pigment	PC-TWA	4 mg/m ³	Total dust.
Titanium dioxide (CAS 13463-67-7)	PC-TWA	8 mg/m ³	Total dust.

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

Exposure guidelines 5 mg/m³ (Respirable Fraction) ACGIH (TWA/TLV): 10 mg/m³ (Inhalable Particulate) 3 mg/m³ (Respirable Particulate)

Monitoring methods Not available.

Engineering measures 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.

Personal protective equipment

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

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

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

Skin and 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.

SECTION 9 Physical and chemical properties

Appearance

Physical state Not available.

Form Solid. Fine powder

Color Black.

Odor Odorless

pH Not available.

Melting point/freezing point Not available.

Boiling point, initial boiling point, and boiling range Not available.

Flash point Not available.

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density Not available.

Solubility(ies)

Solubility (water) Insoluble in water.
Solubility (other) Partially soluble in toluene, chloroform and tetrahydrofuran

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature > 392 °F (> 200 °C)

Other data

Oxidizing properties No information available.

SECTION 10 Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Stability Stable under normal storage conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Conditions to avoid Avoid temperatures exceeding the decomposition temperature. Contact with incompatible materials.

Incompatible materials This product may react with strong oxidizing agents.

Hazardous decomposition products Carbon monoxide and carbon dioxide.

SECTION 11 Toxicological information

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

Components	Species	Test Results
Black Pigment		
<u>Acute</u>		
Oral		
LD50	Rat	> 10000 mg/kg
Ceramic Materials And Wares, Chemicals		
<u>Acute</u>		
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

Routes of exposure Not available.

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).

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitizer This product is not expected to cause skin sensitization.

Germ cell mutagenicity Based on available data, the classification criteria are not met.
Negative Ames Test (Test strains: Salmonella typhimurium).

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.

China OELs for hazardous agents in the workplace: Carcinogen Category

Black Pigment (CAS Proprietary) Possible 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.

Toxic to reproduction	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity following single exposure	Based on available data, the classification criteria are not met.
Specific target organ toxicity following repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.
Chronic effects	Not available.
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.

In 1996, the IARC reevaluated carbon black as a GROUP 2B carcinogen (possible human carcinogen). This evaluation is given to carbon black for which there is inadequate human evidence, but sufficient animal evidence. The latter is based upon the developer of lung tumors in rat receiving chronic inhalation exposures to free carbon black at level that induce particle overload of the lung. Studies performed in animal models other than rats have not demonstrated an association between carbon black and lung tumors. Moreover, a two-year cancer bioassay using a typical toner preparation containing carbon black demonstrated no association between toner exposure and tumor development in rats.

SECTION 12 Ecological information

Ecotoxicological data

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

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.
Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.
Bioaccumulation	Not available.
Mobility in soil	Not available.
Other hazardous effects	Not available.

SECTION 13 Disposal considerations

Residual waste	Not available.
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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 .

SECTION 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.

SECTION 15 Regulatory information

Law of the People's Republic of China on Prevention and Control of Occupational Diseases

Not regulated.

Regulations on the Control over Safety of Dangerous 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.

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Montreal Protocol

Not applicable.

Kyoto protocol

Not applicable.

Basel Convention

Not applicable.

SECTION 16 Other information

References Not available.

Disclaimer This Safety Data Sheet document is provided without charge to customers of HP. Data is the most current known to HP at the time of preparation of this document 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 document was prepared to the requirements of the jurisdiction specified in Section 1 above and may not meet regulatory requirements in other countries.

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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