



SAFETY DATA SHEET

1. Product and company identification

Product name ML-D3477Series
Company identification HP New Zealand
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New Zealand 1010
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(Toll-free within the US) 1-800-457-4209
(Direct) 1-760-710-0048

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(Toll-free within the US) 1-800-474-6836
(Direct) 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.
Limitations on use Do not use with non compatible printer.

2. Hazards identification

GHS classification

Physical hazards Not classified.
Health hazards Not classified.
Environmental hazards Not classified.

Label elements

Symbols 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. None of the other ingredients in this preparation are classified as carcinogens according to ACGIH, EU, IARC, MAK, NTP or OSHA.

This preparation contains no component classified as Persistent, Bioaccumulative, and Toxic (PBT) or very Persistent and very Bioaccumulative (vPvB) as defined under Regulation (EC) 1907/2006.

Supplemental information None.

3. Composition/information on ingredients

Substance or mixture Mixture

Chemical property	CAS Number	Concentration (%)
Carbon black	1333-86-4	<5

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.
Potential delayed 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.

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.
HAZCHEM Code Number	None.
Specific hazards during fire fighting	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.
Hazards from combustion products	Carbon monoxide and carbon dioxide.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	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.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
Spill cleanup methods	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

Handling	
Precautions	Not available.
Safe handling advice	Not available.
Prevention of fire and explosion	Not available.
Storage	
Suitable storage conditions	Store in tightly closed original container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).
Incompatible materials	Not available.

8. Exposure controls/personal protection

Exposure limits

New Zealand. WES. (Workplace Exposure Standards)

Components	Type	Value
Carbon black (CAS 1333-86-4)	TWA	3 mg/m ³

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Carbon black (CAS 1333-86-4)	TWA	3 mg/m ³	Inhalable fraction.

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
Carbon black (CAS 1333-86-4)	STEL	7 mg/m ³
	TWA	3.5 mg/m ³

Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)

Components	Type	Value
Carbon black (CAS 1333-86-4)	TWA	3 mg/m ³

Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

Components	Type	Value
Carbon black (CAS 1333-86-4)	TWA	3 mg/m ³

Biological limit values	No biological exposure limits noted for the ingredient(s).
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.
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.
Skin protection	Protection suit must be worn.
Eye/face protection	Wear safety glasses with side shields (or goggles).
Radioactive or 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**

Physical state	Not available.
Form	Solid. Fine powder
Color	Black.
Odor	Odorless
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Boiling point, initial boiling point, and boiling range	Not available.
Flash point	Not available.
Auto-ignition temperature	Not available.
Flammability (solid, gas)	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.
Evaporation rate	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.
Decomposition temperature	> 392 °F (> 200 °C)
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.
Stability	Stable under normal storage conditions.
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.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Expected to be a low ingestion hazard.
Inhalation	Dust may irritate respiratory system. Prolonged inhalation may be harmful.
Skin contact	Dust or powder may irritate the skin.
Eye contact	Dust may irritate the eyes.

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

Components	Species	Test Results
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Carbon black (CAS 1333-86-4)

Acute

Oral

LD50

Rat

> 10000 mg/kg

Routes of exposure Not available.

Symptoms 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 sensitizer 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.

IARC Monographs. Overall Evaluation of Carcinogenicity

Carbon black (CAS 1333-86-4)

2B Possibly carcinogenic to humans.

Toxic to reproduction 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.

Chronic effects Not available.

Relevant negative data 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.

12. Ecological information

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.
Partition coefficient n-octanol/water (log Kow)	Not available.
Bioconcentration factor (BCF)	Not available.
Mobility	Not available.
Other hazardous effects	This product has not been tested for ecological effects.

13. Disposal considerations

Disposal methods/information	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 .
Special precautions	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**Applicable regulations****New Zealand Inventory of Chemicals (NZIoC): Registration status**

Carbon black (CAS 1333-86-4)

HSNO Approved

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.
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16. Other information

References	Not available.
Issued by	Not available.

Prepared by

Not available.

Disclaimer

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Issue date

01-Jun-2018

Revision date

31-Aug-2018

Revision information

1. Product and Company Identification: Alternate Trade Names

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