

SECTION 3: Composition/information on ingredients

Chemical name	CAS-No	Weight %
Polyester resin	CBI	80 - 90
Wax	CBI	1 - 6
Pigment	CBI	1 - 5
Amorphous silica	7631-86-9	1 - 3
Titanium dioxide	13463-67-7	< 1

SECTION 4: First aid measures

Description of first aid measures

Inhalation Move to fresh air. Get medical attention immediately if symptoms occur.

Ingestion Rinse mouth. Drink 1 or 2 glasses of water. Get medical attention immediately if symptoms occur.

Skin Contact Wash off immediately with soap and plenty of water. Get medical attention immediately if symptoms occur.

Eye Contact Flush with plenty of water. Get medical attention immediately if symptoms occur.

Most important symptoms and effects, both acute and delayed

Inhalation None under normal use. Exposure to excessive amounts of dust may cause physical irritation to respiratory tract.

Ingestion None under normal use.

Skin Contact None under normal use.

Eye Contact None under normal use. May cause slight irritation.

Chronic Effects None under normal use. Prolonged inhalation of excessive amounts of dust may cause lung damage.

Indication of any immediate medical attention and special treatment needed

None

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media

Use CO₂, dry chemical, or foam, Water.

Unsuitable extinguishing media

None

Special hazards arising from the substance or mixture

Special Hazard

May form explosive mixtures with air.

Hazardous combustion products
Carbon dioxide (CO₂), Carbon monoxide (CO)

Advice for firefighters

Special protective equipment for fire-fighters
None

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid breathing dust. Avoid contact with skin, eyes and clothing.

Environmental Precautions

Keep out of waterways.

Methods and material for containment and cleaning up

Clean up promptly by scoop or vacuum. If a vacuum cleaner is used, be sure to use a model with dust explosion safety measures. May form explosive mixtures with air.

Other Information

None

SECTION 7: Handling and storage

Precautions for safe handling

Avoid breathing dust. Avoid contact with skin, eyes and clothing. Clean contaminated surface thoroughly. Use only with adequate ventilation.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep out of the reach of children. Incompatible with oxidizing agents.

SECTION 8: Exposure controls/personal protection

Exposure guidelines

Chemical name	OSHA PEL	ACGIH TLV
Amorphous silica 7631-86-9	TWA: 20 mppcf : (80)/(% SiO ₂) mg/m ³ TWA	None
Titanium dioxide 13463-67-7	TWA: 15 mg/m ³ total dust	TWA: 10 mg/m ³

Appropriate engineering controls None under normal use conditions.

Individual protection measures, such as personal protective equipment

Eye/face Protection Not required under normal use.

Skin Protection Not required under normal use.

Respiratory Protection Not required under normal use.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Cyan ; powder
Odor	Slight odor
Odor threshold	No data available
pH	Not Applicable
Melting/Freezing point (°C)	85-120 (Softening point)
Boiling Point/Range (°C)	Not Applicable
Flash Point (°C)	Not Applicable
Evaporation Rate	Not Applicable
Flammability (solid, gas)	Not flammable; estimated
Flammability Limits in Air	
Upper Flammability Limit	Not Applicable
Lower Flammability Limit	Not Applicable
Vapor pressure	Not Applicable
Vapor Density	Not Applicable
Relative density	1.0-1.5
Solubility(ies)	Organic solvent; partly soluble
Partition coefficient: n-octanol/water	Not Applicable
Autoignition Temperature (°C)	No data available
Decomposition Temperature (°C)	> 200
Viscosity (mPa s)	Not Applicable

Other Information

No data available

SECTION 10: Stability and reactivity

Reactivity

None

Chemical stability

Stable

Possibility of Hazardous Reactions

None

Conditions to Avoid

None

Incompatible materials

Acids, Bases, Oxidizing agents, Reducing agents.

Hazardous Decomposition Products

Carbon dioxide (CO₂), Carbon monoxide (CO)

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity Estimate: LD50 > 2000 mg/kg (Ingestion)

Skin corrosion/irritation Estimate: Non-irritant

Serious eye damage/eye irritation	Estimate: Transient slight conjunctival irritation only.
Sensitization	Estimate: Non-sensitizing
Germ cell mutagenicity	Ames Test (S. typhimurium, E. coli): Negative
Carcinogenicity	The IARC evaluated titanium dioxide as a Group 2B carcinogen, for which there is inadequate human evidence, but sufficient animal evidence. The latter is based upon the evidence such as development of lung tumors in rats receiving chronic inhalation exposure to powdered titanium dioxide at levels that induce particle overload of the lung. However, there is an inhalation study of a toner containing titanium dioxide which suggested no association between toner exposure and tumor development in rats.
Reproductive Toxicity	No data available
STOT - single exposure	No data available
STOT - repeated exposure	Muhle et al. reported pulmonary response upon chronic inhalation exposure in rats to a toner enriched in respirable-sized particles compared to commercial toner. No pulmonary change was found at 1 mg/m ³ which is most relevant to potential human exposure. A minimal to mild degree of fibrosis was noted in 22% of the animals at 4 mg/m ³ , and a mild to moderate degree of fibrosis was observed in 92% of the animals at 16 mg/m ³ . These findings are attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lung for a prolonged interval.
Aspiration hazard	No data available
Other Information	No data available

SECTION 12: Ecological information

Toxicity

Ecotoxicity effects

Estimate: Fish, 96h LL50 > 1000 mg/l (WAF)
Estimate: Crustaceans, 48h EL50 > 1000 mg/l (WAF)
Estimate: Algae, ErL50(0-72h) > 1000 mg/l (WAF)

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13: Disposal considerations

Waste treatment methods

DO NOT put toner or a toner container into fire. Heated toner may cause severe burns. DO NOT dispose of a toner container in a plastic crusher. Use a facility with dust explosion prevention measures. Finely dispersed particles form explosive mixtures with air. Dispose of in accordance with local regulations.

SECTION 14: Transport information

<u>UN number</u>	None
<u>UN Proper Shipping Name</u>	None
<u>Transport Hazard Class</u>	None
<u>Packing Group</u>	None
<u>Environmental Hazards</u>	No special environmental precautions required.
<u>Special Precautions for users</u>	None
<u>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</u>	Not Applicable

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

TSCA Sec. 4,5,6,7,8,12b	None
SARA Title III Sec. 313	None
California Proposition 65	None
CEPA Sec. 81	None (Manufactured Item)
HPA (WHMIS)	None (Manufactured Article)
Other Information	None

SECTION 16: Other information

Key literature references and sources for data

- U.S. Department of Labor, 29CFR Part 1910
- U.S. Environmental Protection Agency, 40CFR Part 372
- U.S. Environmental Protection Agency, 40CFR Part 700-799
- U.S. Consumer Product Safety Commission, 16CFR Part 1500
- ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices
- U.S. Department of Health and Human Services National Toxicology Program, Annual Report on Carcinogens
- World Health Organization International Agency for Research on Cancer, IARC Monographs on the Evaluation on the Carcinogenic Risk of Chemicals to Humans
- California EPA, Code of Regulations Title 27. Division 4. Chapter 1. Safe Drinking Water and Toxic Enforcement Act of 1986
- Environment Canada, Canadian Environmental Protection Act, 1999
- Health Canada, Hazardous Products Act, and Controlled Products Regulations
- Canada Workplace Hazardous Materials Information System

Key or legend to abbreviations and acronyms used in the safety data sheet

- OSHA HCS: Occupational Safety and Health Act, Hazard Communication Standard (USA)
- FHSA: Federal Hazardous Substances Act
- IARC: International Agency for Research on Cancer
- OSHA PEL: PEL(Permissible Exposure Limit) under Occupational Safety and Health Administration (USA)
- ACGIH TLV: TLV(Threshold Limit Value) under American Conference of Governmental Industrial Hygienists
- TWA: Time Weighted Average
- STEL: Short Term Exposure Limit
- TSCA: Toxic Substances Control Act
- SARA Title III: SARA Title III of the Superfund Amendments and Reauthorization Act of 1986
- Proposition 65: Safe Drinking Water and Toxic Enforcement Act of 1986
- CEPA: Canadian Environmental Protection Act, 1999
- HPA: Hazardous Products Act
- WHMIS: Workplace Hazardous Materials Information System
- CBI: Confidential Business Information

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Disclaimer

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