PREMIUM 3D FILAMENTS—PLA **PLA**

Safety Data Sheet

Section 1: Identification

Product Identifier and Other Means of Identification

Product Name: Premium 3D Filaments-PLA **SDS Code:** PLA

Related Part # PLA17TL5, PLA17WH5, PLA17BK5, PLA17RE5, PLA17YE5, PLA17GR5, PLA17BL5, PLA17OR5, PLA17PU5, PLA17GY5, PLA17PI5, PLA17BR5, PLA17GO5, PLA17SI5, PLA17GD5, PLA17SK5, PLA17NA5, PLA17LI5, PLA30TL5, PLA30WH5, PLA30BK5, PLA30RE5, PLA30YE5, PLA30GR5, PLA30BL5, PLA30OR5, PLA30PU5, PLA30GY5, PLA30PI5, PLA30BR5, PLA30GO5, PLA30SI5, PLA30GD5, PLA30SK5, PLA30NA5, PLA30LI5, PLA17TL25, PLA17WH25, PLA17BK25, PLA17RE25, PLA17YE25, PLA17GR25, PLA17BL25, PLA17OR25, PLA17PU25, PLA17GY25, PLA17PI25, PLA17BR25, PLA17GO25, PLA17SI25, PLA17GD25, PLA17SK25, PLA17NA25, PLA17LI25, PLA30TL25, PLA30WH25, PLA30BK25, PLA30RE25, PLA30YE25, PLA30GR25, PLA30BL25, PLA30OR25, PLA30PU25, PLA30GY25, PLA30PI25, PLA30BR25, PLA30GO25, PLA30SI25, PLA30GD25, PLA30SK25, PLA30NA25, PLA30LI25

Recommended Use and Restriction on Use

Use: Filament for 3D printing

Uses Advised Against: Not available

Details of Manufacturer or Importer

Manufacturer
MG Chemicals
1210 Corporate Drive
Burlington, Ontario L7L 5R6
CANADA

☎ +1-800-340-0772
FAX +1-800-340-0773
E-MAIL support@mgchemicals.com
WEB www.mgchemicals.com

MG Chemicals (Head Office)
9347-193 Street
Surrey, British Columbia V4N 4E7
CANADA

☎ +1-905-331-1396
FAX +1-905-331-2682
E-MAIL info@mgchemicals.com

E-MAIL (Competent Person): sds@mgchemicals.com

Emergency Phone Number

For hazardous material incidents ONLY—leaks, spills, fires, exposures or accidents
USA or CANADA: Call CHEMTREC ☎: ***+1-800-424-9300***

For emergencies involving dangerous goods; Collect 24/7
CANADA: Call CANUTEC ☎: ***+1-613-996-6666*** or ****666*** on cellular phones

Section 2: Hazard(s) Identification

Classification of Hazardous Chemical

GHS Categories

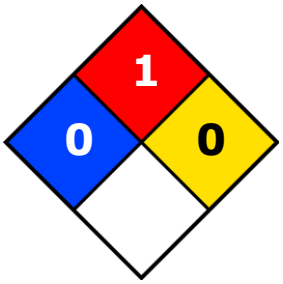
Non-hazardous—does not meet WHMIS or OSHA GHS classification criteria.

Other Classifications

HMIS® RATING

HEALTH:	**0**
FLAMMABILITY:	**1**
PHYSICAL HAZARD:	**0**
PERSONAL PROTECTION:	

NFPA® 704 CODES



Approximate HMIS and NFPA Risk Ratings Legend:
0 (Low or none); 1 (Slight); 2 (Moderate); 3 (Serious); 4 (Severe)

Label Elements

Signal Word	*None Mandated*
Pictograms	**Hazard Statements**
None mandated	None

Hazards Not Otherwise Classified

Not applicable.

Section 3: Composition/Information on Ingredients

CAS #	Chemical Name	Wt%
9051-89-2	Polylactide resin [a)]	<100%

a) Non-hazardous component

Section 4: First-Aid Measures

Exposure Condition	*GHS Code/Symptoms/Precautionary Statements*
IF IN EYES	P305 + P351 + P338
Immediate Symptoms	*mild irritation*
Response	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF SWALLOWED	P301 + P310
Immediate Symptoms	*May cause gastrointestinal blockage.*
Response	IF SWALLOWED: Rinse mouth. Seek medical advice if feeling unwell.
IF ON SKIN	P302 + P352, P332 + P313, P314, P362 + P364
Immediate Symptoms	*None known or expected*
Response	No action are required or suggested.
IF INHALED	P304 + P340, P312, P308 + P313
Immediate Symptoms	*None known or expected* *Exposure to heated vapors or fumes: eye irritation, upper respiratory tract irritation, nausea, headaches*
Response	Remove person to fresh air and keep comfortable for breathing.

Section 5: Fire-Fighting Measures

Auto-ignition Temperature	388 °C [≥730 °F]	**Flash Point**	Not applicable	**LFL [LEL]** **UFL [UEL]** a)	Not applicable

In case of fire	P370 + P378
Extinguishing Media	Use dry chemical, carbon dioxide, chemical foam, or water spray to extinguish. If in a molten state, do not apply direct water stream.
Specific Hazards	See combustion products.
Combustion Products	Produces carbon oxides (CO,CO_2) and adehydes
Fire-Fighter	Wear self-contained breathing apparatus and full fire-fighting turn-out gear.

a) LFL = Lower Flammability [or Explosion] Limit (in volume %);
UFL = Upper Flammability [or Explosion] Limit (in volume %)

Section 6: Accidental Release Measures

Personal Protection	See personal protection recommendations in Section 8.
Precautions for Response	Not applicable
Environmental Precautions	Not applicable
Containment Methods	Not applicable
Cleaning Methods	Reclaim material if possible. Wash spill area with soap and water.
Disposal Methods	May be disposed of as regular waste.

Section 7: Handling and Storage

Prevention	Do not eat, drink, or smoke when using this product.
	Avoid breathing fumes.
Handling	Wash hands thoroughly after handling.
Storage	Not applicable.

Section 8: Exposure Controls/Personal Protection

Routes of Entry

Ingestion

Substances with Occupational Exposure Limit Values

This product contains no substances with occupational exposure limits.

Engineering Controls

Ventilation	General ventilation is adequate for normal use; keep overall exposure as low as possible.

Section continued on next page

Personal Protective Equipment

Eye protection	Wear appropriate protective eyeglasses or chemical safety goggles. **Recommendation:** Ensure that glasses have side shields for lateral protection.
Skin Protection	No skin protection required.
Respiratory Protection	For over-exposures to dust, wear respirator such as a half-mask respirator with organic vapor cartridges with particulate pre-filter. For exposure to combustion products, use a positive-pressure, air-supplied respirator or a self-contained breathing apparatus. **RECOMMENDATION:** Consult your local safety supply store to ensure your respirator has filter cartridges appropriate for the ingredients listed in section 3 of this SDS, and that the respirator is fitted to the employee by a professional.

General Hygiene Considerations

Wash hands thoroughly with water and soap after handling.

Section 9: Physical and Chemical Properties

Physical State	Solid	**Lower Flammability Limit**	Not applicable
Appearance	Variable colors	**Upper Flammability Limit**	Not applicable
Odor	Sweet, light	**Vapor Pressure @20 °C** [b)]	Not available
Odor Threshold	Not available	**Vapor Density**	Not applicable
pH	Not available	**Specific Gravity @25 °C**	1.24
Freezing/Melting Point	≥150 °C [≥302 °F]	**Solubility in Water**	Insoluble
Boiling Point	Not available	**Partition Coefficient**	Not available
Flash Point	Not applicable	**Auto-ignition Temperature**	388 °C [≥730 °F]
Evaporation Rate	Not available	**Decomposition Temperature**	Not available
Flammability (solid, gas)	Not available	**Viscosity @40 °C**	Not applicable

Section 10: Stability and Reactivity

Reactivity	Not available
Chemical Stability	Chemically stable at normal temperatures and pressures
Conditions to Avoid	Incompatible substances, open flames, and temperatures above 230 °C [446 °F].
Incompatibilities	Oxidizing agents, strong bases
Polymerization	Will not occur
Decomposition	Will not decompose under normal conditions. For thermal decomposition, see combustion products in Section 5

Section 11: Toxicological Information

Routes of Exposure

Eye contact, Skin contact, Ingestion, Inhalation,

Symptoms Summary

Eyes	Under normal conditions, no effect known or expected.
	If exposed to heated vapors or fumes: may cause eye irritation.
Skin	Under normal conditions, no effect known or expected.
	If exposed to heated vapors or fumes: may cause skin irritation.
Inhalation	Under normal conditions, no effect known or expected.
	If exposed to heated vapors or fumes: may cause upper respiratory tract irritation, headaches, nausea
Ingestion	May cause gastrointestinal blockage.
Chronic	No effect known

Acute Toxicity (Lethal Exposure Concentrations)

Chemical Name	LD50 oral	LD50 dermal	LC50 inhalation
Acrylonitrile butadiene styrene polymer	>5 000 mg/kg Rat	>2 000 mg/kg Rabbit	Not available

Note: Toxicity data from the RTECS database accessed through the Canadian Centre for Occupational Health and Safety (CCOHS)[2] were consulted. The data from supplier (M)SDS were also consulted.

Section continued on the next page

Other Toxicological Effects

Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/irritation	Based on available data, the classification criteria are not met.
Sensitization (allergic reactions)	Based on available data, the classification criteria are not met.
Carcinogenicity (risk of cancer)	None of the ingredients are classified or listed as a carcinogen by IARC, ACGIH, CA Prop 65, or NTP.
Mutagenicity (risk of heritable genetic effects)	Based on available data, the classification criteria are not met.
Reproductive Toxicity (risk to sex functions)	Based on available data, the classification criteria are not met.
Teratogenicity (risk of fetus malformation)	Based on available data, the classification criteria are not met.
STOT-single exposure	Based on available data, the classification criteria are not met.
STOT-repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Not applicable—solid substance

Section 12: Ecological Information

The IMDG Code criteria, the raw-material safety data sheets, and supporting data from the European Chemical Agency database (http://echa.europa.eu) were used to support the classification.

The component substances are not classifiable as an environmental toxicant. The EC50 72 h is greater than 1100 mg/L.

Acute Ecotoxicity

No data available.

Chronic Ecotoxicity

Available data doesn't give rise to classification as a chronic ecotoxicant.

Biodegradability

Not readily biodegrable

Bioaccumulation

No data availale

Other Effects

None known

Section 13: Disposal Information

Dispose of contents in accordance with all local, regional, national, and international regulations.

Section 14: Transport Information

Ground

Refer to TDG (Canadian Transportation of Dangerous Goods regulations) and **USA DOT 49 CFR** (Parts 100 to 185) **Regulations.**	
Not Regulated	

Air

Refer to ICAO-IATA Dangerous Goods Regulations.	
Not Regulated	

Sea

Refer to IMDG regulations.	
Not Regulated	

Section 15: Regulatory Information

Canada

WHMIS Classification

Not classifiable as hazardous according to WHMIS criteria.

Domestic Substance List (DSL) / Non-Domestic Substance Lists (NDSL)

All hazardous ingredients are listed on the DSL.

Industry and Science Canada

MG Labels products intended for the workplace to conform to WHMIS labeling regulations. Product identification, net quantity declaration, minimum printing type size heights, and packaging of this product are in compliance.

Health Canada

Products produced by MG Chemicals intended for retail display conform to the Canadian Consumer Labeling Regulations.

Section continued on the next page

USA

CAA (Clean Air Act, USA)

This product does not contain any class 1 ozone depleting substances.

This product does not contain any class 2 ozone depleting substances.

This product does not contain substances that are listed as hazardous air pollutants.

EPCRA (Emergency Planning and Right to Know Act, USA, 40 CFR 372.45)

This product contains does not contain substances which are subject to the reporting requirements of section 313 Title III of the SARA of 1986 and 40 CFR part 372.

TSCA (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

California Proposition 65 (Chemicals known to cause cancer or reproductive toxicity, June 06, 2014 revision, USA).

This product does not contain any substances known to be listed in California.

Europe

RoHS

This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, or PBDE's, and complies with European RoHS regulations.

WEEE

This product is not a piece of electrical or electronics equipment, and is therefore not governed by this regulation.

Section 16: Other Information

SDS Prepared by	Michel Hachey
Date of Review	23 December 2014
Supersedes	15 May 2012

Reason for Changes: Change to GHS format in compliance with HCS 2012 and WHMIS.

Section continued on the next page

Reference

1) ACGIH *2013 TLVs and BEIs: Based on the documentation of the threshold limit values for chemical substances and physical agents & biological exposure indices*, American Conference of Governmental of Industrial Hygienist Cincinnati, OH (2013).

2) All toxicological data were checked against the RTECS (Registry of Toxic Effects of Chemical Substances®)

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists (USA)
EC50	Half maximal effective concentration
EL50	Half maximal effective loading
IARC	International Agency for Research on Cancer
NOELR	No observable effect loading ratio
NTP	National Toxicology Program
GHS	Globally Harmonized System of Classification of Labeling of Chemicals
LC50	Lethal Concentration 50%
LCLo	Lowest published lethal concentration
LD50	Lethal Dose 50%
OEL	Occupational Exposure Limit
PEL	Permissible Exposure Limit
SDS	Safety Data Sheet
STEL	Short-Term Exposure Limit
TCLo	Lowest published toxic concentration
TWA	Time Weighted Average
VOC	Volatile Organic Content

Technical Queries Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at www.mgchemicals.com.

Email: support@mgchemicals.com

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