

# PREMIUM 3D FILAMENTS-PLA

PLA

# Safety Data Sheet

Section 1: Identification

**Product Identifier and Other Means of Identification** 

Product Name: PLA

Other Means of Identification: Premium 3D Filaments-PLA

**Related Part #** PLA17BK1, PLA17BL1, PLA17BR1, PLA17CP1, PLA17FLGR1, PLA17FLRE1, PLA17FLYE1, PLA17GD1, PLA17GO1, PLA17GR1, PLA17GY1, PLA17LI1, PLA17NA1, PLA17OR1, PLA17PI1, PLA17PU1, PLA17RE1, PLA17SGN1, PLA17SI1, PLA17SK1, PLA17THRE1, PLA17TL1, PLA17WH1, PLA17YE1, PLA30BK1, PLA30BL1, PLA30BR1, PLA30GD1, PLA30GO1, PLA30GR1, PLA30GY1, PLA30LI1, PLA30NA1, PLA30OR1, PLA30PI1, PLA30PU1, PLA30RE1, PLA30SGN1, PLA30SI1, PLA30SK1, PLA30TL1, PLA30WH1, PLA30YE1

## **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

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

<b>a</b>	+1-905-331-1396
FAX	+1-905-331-2682
E-MAIL	info@mgchemicals.com

E-маіL (Competent Person): <u>sds@mgchemicals.com</u>

#### **Emergency Phone Number**

**For hazardous material incidents ONLY** (leaks, spills, fires, exposures or accidents) USA or CANADA—Call Verisk 3E at **+1-866-519-4752** or **+1-760-476-3962** (Service access code: 335388)

For emergencies involving the transport of dangerous goods; 24/7 service CANADA—Call CANUTEC collect at +1-613-996-6666 or \*666 on cellular phones

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## Section 2: Hazard(s) Identification

#### **Classification of Hazardous Chemical**

#### **GHS** Categories

Non-hazardous-does not meet WHMIS 2015 or OSHA HCS 2012 classification criteria.

#### **Label Elements**

Signal Word	none mandated
Pictograms	Hazard Statements
none mandated	None

#### **Hazards Not Otherwise Classified**

Other	Hazard Statements/Precautionary	Signal	Pictograms
Criteria	Statement	Word	
None	None	None	None

## Section 3: Composition/Information on Ingredients

CAS #	Chemical Name	%(weight)
9051-89-2	Polylactide resin <sup>a)</sup>	<100%

a) Non-hazardous component



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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 irritation or blockage.
Response	Rinse mouth. Seek medical advice if feeling unwell.
IF ON SKIN	P302 + P352, P332 + P313, P314, P362 + P364
Immediate Symptoms	mild irritation
Response	No action are required or suggested.
IF INHALED	P304 + P340, P312, P308 + P313
Immediate Symptoms	low toxicity
	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

Extinguishing Media	In case of fire: Use extinguishing media suitable for surrounding materials.
Specific Hazards	Not flammable or combustible, but burns if involved in a fire.
	See combustion products.
<b>Combustion Products</b>	Produces carbon oxides (CO, $CO_2$ ) and aldehydes
Fire-Fighter	Wear self-contained breathing apparatus and full fire- fighting turn-out gear.



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#### **Section 6: Accidental Release Measures**

Personal Protection	See personal protection recommendations in Section 8.
Precautions for Response	Not applicable
Environmental Precautions	Not applicable
<b>Containment Methods</b>	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

#### Substances with Occupational Exposure Limit Values

This product contains no substances with occupational exposure limits.

#### **Engineering Controls**

VentilationGeneral ventilation is adequate for normal use; keep overall<br/>exposure as low as possible.

#### **Personal Protective Equipment**

Eye protection	Wear appropriate goggles.	protecti	ve eyeglass	es or c	hemical safety	
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**RECOMMENDATION:** Ensure that glasses have side shields for lateral protection.

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Skin Protection	No skin protection required.
<b>Respiratory Protection</b>	For over-exposures to dust, wear a dust mask or mask with particulate pre-filter.
	For exposure to combustion products, use a positive-pressure, air-supplied respirator or a self-contained breathing apparatus.
	<b>RECOMMENDATION:</b> Consult your local safety supply store to ensure that your respirator has a NIOSH (U.S.) approved filter cartridges appropriate for the ingredients listed in Section 3. The respirator should be fitted to the employee by a professional. Ensure vapor cartridges are stored in sealed plastic bags when not being used.

## **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 <sup>b)</sup>	Not available
Odor Threshold	Not available	Vapor Density	Not applicable
рН	Not available	Relative Density @25 °C	1.24
Freezing/Melting	≥150 °C	Solubility in	Insoluble
Point	[≥302 °F]	Water	
Initial Boiling	Not	Partition Coefficient	Not
Point	available	n-octanol/water	available
Flash Point	Not	Auto-ignition	Not
	applicable	Temperature	available
Evaporation	Not	Decomposition	250 °C
Rate	available	Temperature	[≥482 °F]
Flammability	Non	Viscosity	Not
	Flammable	@40 °C	applicable



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## 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

## Summary of Effects and Symptoms by Routes of Exposure

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	LD50	LC50
	oral	dermal	inhalation
Polylactide polymer resin	>5 000 mg/kg	>2 000 mg/kg	Not
	Rat	Rabbit	available

*Note:* Toxicity data from the RTECS<sup>2</sup> and ECHA databases were consulted. The data from supplier SDS were also consulted.

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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.			
<b>Carcinogenicity</b> (risk of cancer)	None of the ingredients are classified or listed as a carcinogen by IARC, ACGIH, CA Prop 65, or NTP.			
<b>Mutagenicity</b> (risk of heritable genetic effects)	Based on available data, the classification criteria are not met.			
<b>Reproductive Toxicity</b> (risk to sex functions)	Based on available data, the classification criteria are not met.			
<b>Teratogenicity</b> (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**

Ecological classifications are based on the IMDG/GHS criteria in conjunction with ecotoxicological data from our suppliers, the European Chemical Agency database (<u>http://echa.europa.eu</u>), and other reliable sources.

The component substances are not classifiable as an environmental toxicant. The EC50 72 h is 1 100 mg/L for algae.

## **Acute Ecotoxicity**

No data available.

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## **Chronic Ecotoxicity**

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

#### Biodegradability

Not readily biodegrable

#### Bioaccumulation

Inherently biodegradable

#### **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



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#### **Section 15: Regulatory Information**

#### Canada

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

All hazardous ingredients are listed on the DSL.

#### Hazardous Products Act (R.S.C., 1985, c. H-3)

The safety data sheet and label comply with the Hazardous Product Act and WHMIS 2015.

USA

#### **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)

**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.

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**California Proposition 65** (Chemicals known to cause cancer or reproductive toxicity, USA)

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

#### Europe

RoHS (Restriction of Hazardous Substances Directive)

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

**WEEE** (Waste Electrical and Electronic Equipment Directive)

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	MG Chemicals' Regulatory Department	
Date of Review	11 September 2019	
Supersedes	25 July 2018	
Reason for Changes: Change to emergency phone numbers.		

#### Reference

1) ACGIH 2017 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 (2017).

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

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#### 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 <u>www.mgchemicals.com</u>.

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