

SAI Global File #004008

Burlington, Ontario, Canada

## 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

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MG Chemicals (Head Office) 9347-193 Street

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

## **Emergency Phone Number**

For hazardous material incidents ONLY (leaks, spills, fires, exposures or accidents) USA or CANADA—Call CHEMTREC at +1-800-424-9300

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 Criteria	Hazard Statements/Precautionary Statement	Signal Word	Pictograms
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.
<b>IF INHALED</b> 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 <sub>2</sub> ) 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** Not applicable

**Precautions** 

**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.

Wash hands thoroughly after handling. 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**

Ventilation General ventilation is adequate for normal use; keep overall

exposure as low as possible.

#### **Personal Protective Equipment**

Eye protection Wear appropriate protective eyeglasses or chemical safety

goggles.

**RECOMMENDATION:** Ensure that glasses have side shields for

lateral protection.

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**Skin Protection** No skin protection required.

**Respiratory Protection** 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.

**RECOMMENDATION:** 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 n-octanol/water	Not
Point	available		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** Chemically stable at normal temperatures and pressures

Stability

**Conditions to** Incompatible substances, open flames, and temperatures above

**Avoid** 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 Based on available data, the classification criteria are

damage/irritation not met.

Sensitization Based on available data, the classification criteria are

(allergic reactions) not met.

Carcinogenicity None of the ingredients are classified or listed as a (risk of cancer) carcinogen by IARC, ACGIH, CA Prop 65, or NTP.

Based on available data, the classification criteria are Mutagenicity

(risk of heritable genetic effects) not met.

**Reproductive Toxicity** Based on available data, the classification criteria are

(risk to sex functions) not met.

**Teratogenicity** (risk of fetus Based on available data, the classification criteria are

malformation) 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 (http://echa.europa.eu), 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**

<b>Refer to TDG</b> (Canadian Transportation of Dangerous Goods regulations) and <b>USA DOT 49 CFR</b> (Parts 100 to 185) <b>Regulations.</b>		
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:** Update to WHMIS regulation name in section 2.

#### 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 www.mgchemicals.com.

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L7L 5R6 V4N 4E7

**Disclaimer** This safety data sheet is provided as an information resource only.

M.G. Chemicals, Ltd. believes the information contained herein is accurate and compiled from reliable sources. It is the responsibility of the user to query and verify any information seeming suspect where doubt on the validity may exist. The buyer assumes all responsibility of using and handling the product in accordance with local, regional,

national, and international regulations.