



# MATERIAL SAFETY DATA SHEET (MSDS)

## SECTION 1: Identification of the Product and Company

**Description:** 3D Printer Filament, PLA Compound  
**Product Name:** PLA Classic (Color: Carbon Black)  
**Details of the Supplier:**  
Ngai Hing Hong Plastic Materials (Hong Kong) Limited  
Unit 3, 6/F Hopeful Factory Center, 10 Wo Shing Street, Fo Tan, Shatin,  
New Territories, Hong Kong  
**Details of the Manufacturer:**  
Dongguan Ngai Hing Plastic Materials Limited  
Chiling Industrial Zone, Houjie Town, Dongguan City, Guangdong Province, P.R.C.  
**Emergency Telephone Number:** (852) 2693 1663

## SECTION 2: Hazards Identification

**Classification System:**  
This product is not classified according to the Regulation EC 1272/2008 (CLP).  
**Label Elements:**  
Not applicable.  
**Potential Hazards:**  
Under normal processing conditions, this product is not expected to be an acute inhalation toxicity, eye and skin irritation.

## SECTION 3: Composition/Information on Ingredients

Definition	Mixture	
Ingredient(s)	Weight by Percentage (%)	CAS Registry Number
Base Resin, Polylactide Resin (PLA)	80-90	9051-89-2
Reinforcing Agent, Thermoplastic Elastomer	10-20	Trade Secret

## SECTION 4: First Aid Measures

**Description of first aid measures**  
**Eye Contact:** Rinse the affected area thoroughly with fresh water.  
**Inhalation:** Shift to a place with well ventilation. Call a doctor in case of discomfort.  
**Skin Contact:** Flush immediately the affected area with plenty of cold water in case of contact with molten polymer melt. Further medical treatment may be required for skin burning  
**Ingestion:** Not applicable.  
**Protection of first-aiders:** Not applicable.  
**Notes to physician:** Not applicable.



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### SECTION 5: Fire Fighting Measures

**Extinguishing Media:** Use water spray, foam, dry chemicals and carbon dioxide.

**Fire and Explosion Hazards:** No specified fire or explosion hazard. When combusted, the following hazardous substances can be released: Oxides of carbon (CO<sub>x</sub>), nitrogen (NO<sub>x</sub>) and acetaldehyde.

**Protective Equipment:** When exposing to combustion substances at the fire scene, fire fighters should wear suitable personal protective equipment. (Full protective clothing, self-contained breathing apparatus, helmet, goggles, gloves, boots).

### SECTION 6: Accidental Release Measures

**Personal Precautions:** Spilled or leaked material can cause a slipping hazard. Clean up immediately and dispose of them properly. Wear appropriate respiratory protective equipment when responding to large clean-ups. Avoid contact with eyes, skin and clothing. Accumulations of dust should be avoided as it can be inflammable.

**Environmental Precaution:** No specific measures. Should prevent the environment from further leaking and spillage.

### SECTION 7: Handling and Storage

**Handling:** Avoid dust formation. Ensure adequate ventilation when handling this product. Wear personal protective equipment if necessary. Wash hand thoroughly after handling. Smoking, eating and drinking should be prohibited during handling this product.

**Conditions for Storage:**  
Store in a cool and dry place. Keep at temperatures below 50°C. Protect from any heat source and moisture/water. Contact with incompatible material should be avoided.

### SECTION 8: Exposure Control

**Engineering Control:** Ventilation should be provided to exhaust air contamination and reduce exposures. Keep at temperatures below 230°C.

**Eye Protection:** Avoid eye contact. Safety glasses should be equipped.

**Skin Protection:** Wear protective gloves when handling of this product. Wash hands and contaminated skin thoroughly after handling.

**Respiratory Protection:** Avoid breathing fumes or vapors. Wear respiratory equipment in case of inadequate ventilation. Use full-face positive pressure, self-contained breathing apparatus for over-exposure.



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## SECTION 9: Physical and Chemical Properties

<b>Appearance:</b> Solid filament	<b>Odor:</b> Odourless
<b>Specific Gravity:</b> 1.1-1.3 (Water=1)	<b>Melting Point:</b> 150-190°C
<b>PH:</b> Not applicable	<b>Boiling Point:</b> Not applicable
<b>Flammability:</b> Flammable	<b>Flash Point:</b> Not applicable
<b>Solubility in Water:</b> Insoluble	<b>Decomposition Temperature:</b> >230°C

## SECTION 10: Stability and Reactivity

**Stability:** This product is chemically stable under normal use and storage condition.

**Incompatibility:** Avoid moisture and water.

**Hazardous Decomposition Products:** Oxides of carbon and nitrogen (CO<sub>x</sub>, NO<sub>x</sub>) and acetaldehyde can be released under fire exposure.

## SECTION 11: Toxicological Information

Refer to Section 2 for potential hazards to health. Toxicology information of this product has not been concluded.

## SECTION 12: Ecological Information

**Toxicity:** Not available

**Persistence and degradability:** Decomposes in contact with water. The hydrolysis product is S-lactic acid which is readily biodegradable.

**Bio accumulative Potential:** Not available

**Mobility in Soil:** Not available

**PBT and vPvB assessment:** Not applicable

## SECTION 13: Disposal Information

**Waste Disposal:**  
Consult and should comply with local environmental regulations for any waste disposal.



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## SECTION 14: Transportation

**UN Number:** Not regulated  
**UN Proper Shipping Name:** Not regulated  
**Transport Hazards Classes:** Not regulated  
**Packing Group:** Not regulated  
**Environmental Hazards:** Non-hazardous  
**Safe Transport of Goods:** Non-restricted goods *by sea* according to Certification ID *MOIFI5MT26849711* (valid until 31-12-2020)

## SECTION 15: Regulation Information

This product is applicable to the following safety, health and environmental regulations/legislation:

Annex XIV – Substances of Very High Concern (SVHC) in accordance with article 59 of the European Regulation 1907/2006 (REACH)

EU Directive 2015/863 (RoHS 3.0)

## SECTION 16: Other Information

The information given within this MSDS is based on our best knowledge at the latest moment. Since usage of this product is not under control of the manufacturer, it makes no guarantee of product performance intended to use for any application. This MSDS is provided to use as Safety, Health and Environmental guidance only.

**Date of Revision:** September 14, 2020  
**Latest Version:** MSDS-PLA Classic Rev. D