

Material Safety Data Sheet

According to EU Directive 1907/2006

1. Product and company identification.

Product Name: Filamento PLA Premium BQ

Product Use: 3D Printing.

Details of the supplier of the safety data sheet:

Mundo Reader SL

C/Sofía 10 – Pol. Europolis

28232 Las Rozas de Madrid

España

www.bq.com/es/support

Emergency phone number: 112

2. Hazards identification.

Classification: This product is NOT classified according to 29 CFR 1910.1200 Hazard Communication Standard 2012.

Hazard Statement: None.

Precautionary Statement: None.

Signal word: None.

Potential health effects: See Section 11 for more information.

Environmental precautions: See Section 12 for more information.

Other Hazards: None.

3. Composition/information on ingredients.

Chemical name: Polylactide resin 9051-89-2.

Weight %: >98.

4. First aid measures.

Eye contact: It is unlikely that first aid will be required. Dust may be irritating to the eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention, if needed.

Skin contact: It is unlikely that first aid will be required. Wash with plenty of soap and water if skin irritation occurs and get medical advice/attention. Cool skin rapidly with cold water after contact with hot polymer and don't separate solidify product from skin. Get medical attention, if needed.

Inhalation: Move to fresh air. Call a physician immediately.

Ingestion: Drink water as a precaution. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Call a physician immediately.

Inhalation: Heating may release vapors which may be irritating. In case of inhalation of decomposition products, affected person should be moved into fresh air and kept still. Get medical advice/attention.

Notes to physician: Treat symptomatically

5. Fire-fighting measures.

Flammability: Autoignition temperature: 388C.

Flammability Limits in Air:

Flammable limits in air - lower (%): Not applicable.

Flammable limits in air - upper (%): Not applicable.

Suitable extinguishing media: Foam. Water. Carbon dioxide(CO₂). Dry chemical. Alcohol resistant foams are preferred if available. General-purpose synthetic foams (including AFFF) or protein foams may function, but much less effectively.

Extinguishing media which must not be used for safety reasons: None known.

Hazardous decomposition products: Burning produces obnoxious and toxic fumes Aldehydes Carbon monoxide (CO) carbon dioxide (CO₂).

Special protective equipment for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Under fire conditions: Cool containers / tanks with spray water. Water mist may be used to cool closed containers.

6. Accidental release measures.

Personal Precautions: Use Protective Equipment. See Section 8 for more information.

Methods for cleaning up: Let solidify molten product and collect spilled material in appropriate container for reuse or disposal.

Environmental precautions: Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system.

7. Handling and Storage.

Precautions for Safe Handling: Minimize dust generation and accumulation. Avoid contact with heated or molten product.

Storage: Store in cool place. Keep at temperatures below 122F (50 °C). Protect from moisture and direct sunlight. No special restrictions on storage with other products.

Precautions: No special precautions required.

8. Exposure controls/personal protection

EU - Occupational Exposure (98/24/EC) - Binding Biological Limit Values and Health Surveillance Measures: There are no biological limit values for any of this product's components.

ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI): There are no biological limit values for any of this product's components.

Engineering Controls: Provide local exhaust ventilation system. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing.

Individual Protection Measures, such as Personal Protective Equipment:

Eye/face protection: None during normal use. Protect against molten solid.

Skin Protection: None during normal use. Protect against molten solid.

Respiratory Protection: No respirator is required under normal conditions of use. If respirable dusts are generated, respiratory protection may be needed.

Glove Recommendations: Protect against molten solid. In the molten form: Wear thermal protective gloves.

9. Physical and chemical properties.

Appearance: Spool, filament.

Color: See filament datasheet.

Physical state: Solid.
Odor: odorless, sweet.
pH: Not applicable.
Vapor pressure: Not determined.
Vapor density: Not determined.
Evaporation rate: Not determined.
Density: 1.24 g/cc.
Boiling point/range: Not applicable.
Decomposition temperature: 482F (250C).
Melting point/range: 145-160.
Water solubility: Insoluble.
Solubility in other solvents: None known.
Odor detection threshold: Not determined.
Freezing point: Not applicable.
Ignition point: Not determined.
Autoignition temperature: 338°C.
Relative viscosity: 3.3
Flammability: Not determined.
Flammability/explosiveness limits: Not applicable.
Distribution coefficient: Not applicable.
Explosive properties: Not determined
Ignition properties: Not determined

10. Stability and reactivity.

Reactivity: The product is chemically stable under recommended conditions of storage, use and temperature.

Stability: Stable under recommended storage conditions. See Section 7 for more information.

Conditions to avoid: Temperatures above 446F (230 °C).

Materials to avoid: Oxidizing agents. Strong bases.

Hazardous decomposition products: Burning produces obnoxious and toxic fumes, aldehydes, carbon monoxide (CO), carbon dioxide (CO₂).

11. Toxicological information.

Principle Routes of Exposure: Eye contact. Skin contact. Inhalation. Ingestion.

Acute toxicity: There were no target organ effects noted following ingestion or dermal exposure in animal studies.

Inhalation: No hazard is expected from the normal use of this product. Dust may cause irritation of the nose, throat and upper respiratory tract. Burning produces irritant fumes.

Skin Contact: Molten material may cause burns.

Eye Contact: Molten material may cause burns.

Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Long term toxicity: Did not cause skin allergic reactions in skin sensitization studies using guinea pigs.

Mutagenic effects: Not mutagenic in AMES Test.

Reproductive toxicity: No data is available on the product itself.

Carcinogenic effects: No data is available on the product itself.

Target organ effects: There were no target organ effects noted. following ingestion or dermal exposure in animal studies.

Skin: LD50/dermal/rabbit > 2000 mg/kg.

Ingestion: LD50/oral/rat > 5000 mg/kg.

12. Ecological information.

Toxicity: See section 11 for more information.

Persistence and degradability: The product is biodegradable.

Bioaccumulation potential: Does not bioaccumulate. Inherently biodegradable.

Mobility: No data available.

PBT and vPvBs results: Not applicable.

13. Disposal considerations.

Waste from residues / unused products: In accordance with local and national regulations. Do not contaminate ponds, waterways or ditches with chemical or used container. The company has no control over the management practices or manufacturing processes of parties handling or using this material.

14. Transport information.

U.S. Department of Transportation (DOT): Proper shipping name:

Not regulated as a hazardous material.

IMDG:

Proper shipping name: None.

Hazard class: Not regulated.

UN/Id No.: None.

Packing group: None.

ICAO/IATA:

Proper shipping name: None.

Hazard Class: Not regulated.

Packing group: None.

15. Regulatory information.

(Not meant to be all inclusive--selected regulations represented).

NOTICE: The information herein is presented in good faith and believed to be accurate as of the print date shown above. However, no warranty, express or implied is given.

Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations.

See other sections for health and safety information.

U.S. REGULATIONS:

Sara 313 title III: Not Listed.

TSCA Inventory List: Listed.

STATE REGULATIONS:

California Proposition 65 Not Listed.

INTERNATIONAL INVENTORIES:

Canada DSL Inventory List : Listed

REACH/EU EINECS List : Components are in compliance with and/or are listed.

Japan (ECL) : Listed.

Australia (AICS): Listed.

Korean chemical inventory: Listed.

Phillipines (PICCS) inventory: Not Listed.

China inventory of existing chemical substances list : Listed.

16. Other information.

New SDS: 21/06/2016

Acronyms List:

CFR: Code of Federal Regulations
AFFF: Aqueous Film Forming Foam
MSHA: Mine Safety and Health Administration
NIOSH: National Institute of Occupational Safety and Health
EU: European Union
ACGIH: Association Advancing Occupational and Environmental Health
BEI: Biological Exposure Indices.
DOT: Department Of Transportation
IMDG: International Maritime Dangerous Goods
ICAO: International Civil Aviation Organization
IATA: International Air Transport Association
TSCA: Toxic Substances Control Act
SARA: Superfund Amendments and Reauthorization Act.
DSL: Domestic Substance List
EINECS: European Inventory of Existing Chemical Substances
ECL: Existing Chemicals List
AICS: Australian Inventory of Chemical Substances
PICCS: Philipines Inventory of Chemicals and Chemical Substances
SDS: Safety Data Sheet.

Notes: It is final user duty to make a reasonable use for this product, taking special consideration for the type of printed part and its purpose. It is necessary taking in account the features of the filament used with the 3D printer. With general nature and not restrictive, printed parts with Filamento PLA Premium BQ must not be risked to conditions that could compromise its physical integrity.