



Material Safety Data Sheet: CX02 PLA SERIES 3D PRINTING FILAMENT

BASE RESIN: NatureWorks™ Ingeo 4043D

1. Identification of the substance/preparation and of the company

- 1.1 Trade name: Coex PLA 3D printer filament
- 1.2 Use of the product: 3D printer filament, thermoplastic.
- 1.3 Supplier: Coex
660 Corporate WAY
Pulaski, WI 54162
Phone: (920) 757-1055

2. Hazards identification

- 2.1 Classification: This product is NOT classified according to 29 CFR 1910.1200 Hazard Communication Standard 2012
- 2.2 Special advice on hazards: If small particles are generated during further processing, handling, or by other means, combustible dust concentrations in air may form.

3. Composition / information on ingredients

3.1 Chemical characteristics:		
CAS #	Hazardous Components	Concentration
9051-89-2	Polylactide resin	>=98 %

4. First-aid measures

- 4.1 On skin contact: In case of contact with molten polymer immediately cool the skin with cold water. Medical aid may be required to remove adhering material and for treatment of burns.
- 4.2 After inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
- 4.3 On ingestion: If swallowed, wash out mouth with water provided person is conscious. Do NOT induce vomiting.
- 4.4 On eyes contact: In case of contact, immediately flush eyes with copious amounts of water for at least {15} minutes.

5. Fire-fighting measures

- 5.1 Suitable fire extinguishing media: Water spray, chemical powder or carbon dioxide.



MSDS Rev 1.0

- 5.2 Special exposure hazards: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon dioxide. Carbon monoxide.
- 5.3 Special protective equipment: Self-contained breathing apparatus
- 5.4 Remark: Cool containers / tanks with water spray. Water mist may be used to cool closed containers. Fine dust dispersed in air may ignite. Risks of ignition followed by flame propagation or secondary explosions shall be prevented by avoiding accumulation of dust, e.g. on floors and ledges.

6. Accidental release measures

- 6.1 Personal precautions: Spilled material may cause a slipping Hazard.
- 6.2 Methods for cleaning up: Vacuum or sweep up material and place into a suitable disposal container.

7. Handling and storage

- 7.1 Handling: Avoid contact with molten polymer. Avoid generation of dust and electrostatic charge.
- 7.2 Storage: Protect against moisture. Store cool and keep packaging closed when not in use. Avoid sources of ignition.

8. Exposure controls/ personal protection

- 8.1 Technical safety measures: Use with adequate ventilation. Minimize dust generation and accumulation as combustible dust mixtures may be formed.
- 8.2 Personal safety equipment: Use adequate safety equipment, e.g. protective clothing, eye protection glasses, heat protection gloves. In case of dust formation wear mask with particle filter.
- 8.3 Work hygiene: No eating or drinking during working. Avoid contact of hot material with the skin. Avoid breathing dust and vapors.

9. Physical and chemical properties

- 9.1 Form: Spool
- 9.2 Color: Various
- 9.3 Odor: Sweet
- 9.4 Melting Temperature: 150-180C
- 9.5 Oxidizing properties: Not self-igniting / flammable
- 9.6 Explosions limits: No test data
- 9.7 Density: 1.25 g/cm³
- 9.8 Solubility in water: Insoluble



10. Stability and reactivity

- 10.1 Stability: The product is stable at recommended storage conditions.
- 10.2 Conditions to be avoided: Stable under recommended conditions of storage and handling.
- 10.3 Substances to be avoided: No special recommendations.
- 10.4 Hazardous decomposition products:
Decomposition products depend upon temperature, air supply and the presence of other materials. Processing may release fumes and other decomposition products. At temperatures exceeding melt temperatures, polymer fragments can be released. Fumes can be irritating. Decomposition products can include and are not limited to: Combustible gases.

11. Toxicological information

- 11.1 Local irritation: Eye, Skin, Inhalation, Ingestion.
- 11.2 Other remarks: Product dust may be irritating to eyes, skin and respiratory system. Resin particles, like other inert materials, are mechanically irritating to eyes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Ecological information

- 11.3 Ecological info: EC50/72h/algae > 1100 mg/L
- 11.4 Biological degradation: Inherently biodegradable under industrial composting conditions.
- 11.5 Bioaccumulation: Not expected to bioconcentrate or bioaccumulate.
Data for Component: White mineral oil (petroleum)(8042-47-5) Bioconcentration potential is high (BCF > 3000 or Log Pow between 5 and 7).
Bioconcentration Factor (BCF): 1,900; Fish; Estimated.

12. Disposal considerations

- 12.1 Product: In accordance with local and national regulations. Should not be released into the environment. Do not contaminate ponds, waterways or ditches with chemical or used container.
- 12.2 Uncleaned packaging: Packaging material has to be emptied completely and disposed in accordance with the regulations. Packaging can be recycled if not contaminated.

13. Transport information

- 13.1 Transport regulations: Not classified as hazardous under transport regulations DOT, ICAO/IATA, IMDG/GGVSee, ICAO/IATA

14. Regulatory information



MSDS Rev 1.0

14.1 EPA regulations:

Sara 313 title III: Not Listed

TSCA Inventory List: Listed

15. Other information

This data is based on the current state of our information and experience.

This safety data sheet describes our product in terms of safety requirements.

Preceding data is not applicable as a warranty of product properties.

It is the responsibility of the recipient to observe the existing legal regulations for the use of this product.



www.coex3d.com

Disclaimer: The safety data contained on this data sheet is furnished without charge or obligation and accepted at the recipient's sole risk. This data describes our product in terms of safety requirements. The data provided is not applicable as a warranty of product properties. It is the responsibility of the recipient to observe the existing legal regulations for the use of this product.