Polyinks®-PLA Powder 5 g

Catalog Number: IR-202-1

Overview

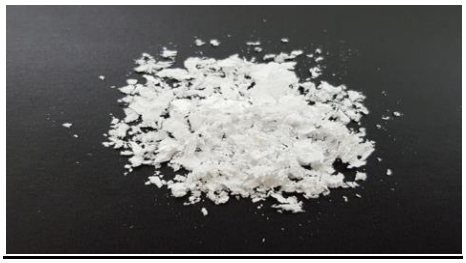
Poly(L-lactide)(PLA) is a biodegradable polyester with a melting temperature of around 180 °C. PLA has been widely used in a variety of biomedical applications, both experimentally and clinically. PLA was approved by FDA for multiple clinical applications, including drug delivery devices, sutures and adhesion barriers.

PLA is degraded by hydrolysis of its ester linkages in the human body, but the rate of degradation is moderately slow. Recently, PLA has been used frequently for 3D bioprinting applications due to its relatively low melting temperature for easy delivery through a fine nozzle, a higher printing speed, and strong adhesive properties between the deposition layers. Moreover, dispensed PLA readily forms and maintains 3D structures with durable structural integrity.

InnoRegen' Polyinks®-PLA powder is a research grade polymer that has been shown to dispense easily, and facilitates building of 3D structures using a commercially available 3D printer. The dispensed PLA shows excellent adhesion between printed layers, leading to a durable and structurally stable tissue construct. For applications involving the use of cells, the Polyinks®-PLA powder is best used with our gelatin-based Gel4Cell®bioink products

Specifications

- White powder
- 5g powder
- Research-grade



Storage & Handling

Polyinks®-PLA powder should be stored at ambient temperature in a dry place such as dessicator For a long-term storage, we recommend keeping the Polyinks®-PLA product in a cool, dry and dark place until use. InnoRegen, Inc. is not responsible for the deterioration caused by negligence of the consumer's improper storage.

Recommended Printing Conditions

To obtain the best printing results, we recommend keeping the printer in a room with no drifts and minimal temperature fluctuation. The printing temperature recomme

nded to achieve optimal results is 200°C~250°C, depending on the type of 3D printer used.

Caution

This product is for research use only. It is not approved for use in diagnostic or therapeutic procedures.

For additional support, visit www.innoregen.com or E-mail info@innoregen.com