

PolyInks[®]-PLCL-W 1 g powder

Catalog Number: IR-203

Specification

Chemical name: Poly(lactide-co- ε -caprolactone) (PLCL) Formula: $(C_8H_{16}O_6)_n$



Molecular weight: ca. 520,000 **Appearance:** White solid power

Overview

The Polyinks®-PLCL is specifically developed and optimized for bioprinting of 3D structures. The Polyinks®-PLCL is a biodegradable copolymer of lactide and caprolactone. Polyinks®-PLCL-W is designed for fast degradable polymer.

Characterizations

¹H-NMR





DSC: Tg ~30°C

Degradation rate: MW₅₀ ~ 2.9 weeks



Storage & Handling

Polyinks®-PLCL can be stored at ambient room temperature and must keep away from moisture. Polyinks®-PLCL is hygroscopic, and moisture should be avoided. Therefore, storage at -20°C and non-moisture condition is recommended for a long-term storage.

Instructions for Use

- Prior to printing process, Polyinks®-PLCL is dried at 30 – 40°C for 2 – 4 hours to minimize moisture (recommended)
- 2. Load Polyinks®-PLCL into the extruder and set the printing parameters as recommended below.

Pressure	Scan speed	Printing
(kPa)	(mm/min)	temperature (°C)
100 -900	60 – 180	80 – 165

Caution

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

For support visit <u>www.innoregen.com</u> or E-mail <u>info@innoregen.com</u>