



Polycaprolactone/PCL Particles

PRODUCT DATA SHEET

Polycaprolactone/PCL Particles

Description

Polycaprolactone particles are spherical microparticles prepared from biodegradable materials such as polycaprolactone as a carrier by emulsification-coalescence and other techniques, with an average particle size that can be controlled between a few micrometres and tens of micrometres. As a biodegradable medical material with good biocompatibility, it is often used in long-acting sustained-release dosage forms of drugs due to its long degradation time, which is particularly suitable for the development and application of microsphere carriers. Also, polycaprolactone microspheres and their composites are one of the alternative materials for bone tissue engineering scaffolds. Due to their excellent biocompatibility and controllable release properties, they have been widely used in the fields of drug delivery and gene carriers. Abvigen's polycaprolactone particles have excellent biocompatibility, memory, biodegradability, etc. It is widely used in various fields: surgical suture, orthopedic splint, radiotherapy plate, resin bandage, dental impression, etc.

For custom sizes, formulations or bulk quantities please contact our customer service department.

website: www.abvigen.com **Phone:** +1 929-202-3014 **Email:** info@abvigenus.com

Characteristics

Concentration: 50 mg/ml

Size: 10 ml

Shape: Spherical

Composition: Polycaprolactone/PCL Particles

Density: 1.1 g/ccm

Buffer: PBS

Form: Suspension

Store: Storage at 2 - 8 °C

Storage

1378 US-206 Ste 6-126, Skillman, NJ USA

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Reserved

Email:

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This product should be stored at 4°C. **DO NOT FREEZE.**

For 50 mg/ml of Polycaprolactone/PCL Particles

Diameter	Conc. mg/ml	Particles/mg	Particles/ml
40 um	10	2.71E+04	2.71E+05

References

- [1]Gurler E B, Ergul N M, Ozbek B, et al. Encapsulated melatonin in polycaprolactone (PCL) microparticles as a promising graft material[J]. Materials Science and Engineering: C, 2019, 100: 798-808.
- [2]Mohamed R M, Yusoh K. A review on the recent research of polycaprolactone (PCL)[J]. Advanced materials research, 2016, 1134: 249-255.
- [3]Forigua A, Dalili A, Kirsch R, et al. Microfluidic generation of therapeutically relevant polycaprolactone (PCL) microparticles: computational and experimental approaches[J]. ACS Applied Polymer Materials, 2022, 4(10): 7004-7013.
- [4]Archer E, Torretti M, Madbouly S. Biodegradable polycaprolactone (PCL) based polymer and composites[J]. Physical Sciences Reviews, 2023, 8(11): 4391-4414.

Ordering Information

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