



Product Information

Customized double-network (DN) hydrogels

Cat. No.: X26-04-ZQ2243

Size: 100 mg; 250 mg; 500 mg; 1 g; 5 g

Synonym: Tailored DN hydrogel; High-toughness double-network gel; Custom DN matrix

This product is for research use only and is not intended for diagnostic use.

Product Information

Description	Customized double-network (DN) hydrogels are exceptionally tough materials consisting of two contrasting polymer networks. The composition typically pairs a brittle, highly crosslinked first network with a ductile, loosely crosslinked second network. This structure dissipates energy through the sacrificial breakage of the first network, resulting in high fracture toughness.
Source	Custom synthesis
Form	Solid
Purity	≥95%
Impurities	No visible impurities to the naked eye.
Identity	HPLC/MS/NMR
Stability	This product is stable for one year when stored at the recommended temperature in lyophilized powder.
Quality Level	Research grade
Applications	This product can be used for the development of load-bearing soft materials, the study of fracture mechanics in gels, and the fabrication of high-performance industrial dampers.
Storage	Store at -20°C.