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## APPLICATION OF ALGINATE<sup>2</sup>

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**Abstract:** Alginates have been widely applied and explored in many fields due to their significant advantages. They have a vast application in the food, pharmaceutical, and environmental areas due to their excellent gelling capacity. Concerns about environmental issues and pursuits of material functionalities have driven the development and application of biopolymers with diverse physical, chemical, and biological properties. Alginates are also used in 3D printing, fire-resistant materials, drug delivery, model foods and active packaging. Their excellent biocompatibility and biodegradability further extend their application to biomedical fields.

**Keywords:** alginate, application, gel formation, encapsulation, films, emulsions, fibers, food, environment

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