

# Curdlan

## **Product Introduction:**

Curdlan is a kind of neutral water-insoluble microbial exopolysaccharide, which has thermal gelation properties and can be widely used in the food processing industry (e.g. vegetarian food, wheaten food, quick-frozen foods, etc.) to increase Product water-holding, elasticity, taste and other characteristics.

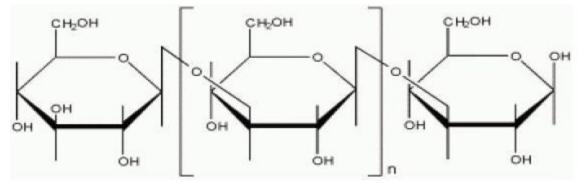
#### Laws and Regulations:

In 1996, USA FDA approve and allow Curdlan Gum as food additive to add directly in food industry. In 2006, Curdlan is approved by China as new-type food additive, implemented of the national standard GB28304-2012.

## Molecular Structure

Curdlan is composed of glucose by linkage of linear  $\beta(1,3)$  Glycosidic bond, the structure is below:

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# Application:

At present, Curdlan can be widely used in the food processing industry as a gelling agent, water-holding agent, film-forming agent, thickener, binder, and stabilizer, and can improve food texture, elasticity, and water holding properties. The usage and usage in different foods can refer to the following table:



Food name	Maximum usage	
Tofu Wet noodles (such as noodles and dumplings)	Appropriate use according to production needs	
Suede, burned wheat skin)	Appropriate use according to production needs	
Dry noodle products Instant rice flour products cooked meat products Frozen fish meat products (including fish balls, etc.)	Appropriate use according to production needs Appropriate use according to production needs Appropriate use according to production needs Appropriate use according to production needs	
Jelly	Appropriate use according to production needs	
Others (artificial seafood products such as man-made Abalone, artificial sea cucumber, artificial seafood shellfish, etc.)	Appropriate use according to production needs	

#### Package & Storage

Package is 20kg/drum, store sealed in dark and dry place.

#### **Technical Data Sheet:**

ltem		Standard
Gel strength(g/cm <sup>2</sup> )	$\geq$	450
Curdlan content(calculate by anhydrous glucose), w /%	$\geq$	80
PH (1%Aqueous solution)		6.0-7.5
Drying reduction,w /%	$\leqslant$	10
Ash, w/%	$\ll$	6.0
Total nitrogen,w /%	$\leq$	1.5
Lead(mg/kg)	$\leq$	0.5
Colonies number/ (CFU/g)	$\leq$	10000
Coliform bacteria/(MPN/g)	$\leqslant$	3.0