

# ChitoVan™ chitosan lactate cartridge

FREE SAMPLES  
AVAILABLE



ChitoVan chitosan lactate is a **powerful, safe** and **natural** water treatment biopolymer that removes suspended sediment and other contaminants from water. ChitoVan is a powerful flocculent and when used with filtration, is capable of consistently reducing turbidities by more than 95% to less than 10 NTU. ChitoVan has been used across the U.S. and Canada to clean billions of gallons of water since its introduction in 2006.

## INSTALLATION AND USE



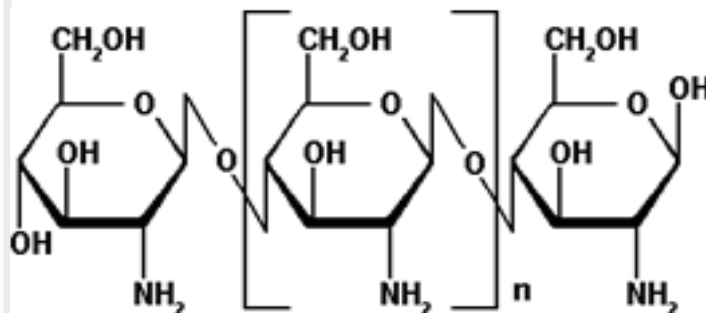
Simply anchor the cartridge in flowing dirty water and it will convert into a slow-dissolving gel. As it dissolves, chitosan is released into the water causing fine sediment particles to flocculate. Once treated, water can be gravity settled, biofiltered, infiltrated, sand filtered or filtered by a dewatering bag. Visit our website for more information to assist with installation and maintenance.

## PRODUCT AVAILABILITY

The ChitoVan Cartridge is a chitosan salt encased within a permeable cartridge. Dungeness offers four different cartridges: 1-lb black, 2-lb black, 1-lb green and 2-lb green.

ChitoVan products are available directly through Dungeness or through one of our many nationwide and Canadian distributors. Contact Dungeness Environmental to locate a distributor near you.

## WHAT IS CHITOSAN?



Chitosan (shown above) is a natural biopolymer derived from chitin - the structural material found in crustaceans. Found naturally in the environment, chitosan is 100 % biodegradable. Chitosan is a long chain polymer and possesses a strong positive charge. Dirt particles typically are negatively charged. Chitosan flocculates (clump together into a large mass) fine dirt particles causing them to settle thereby clarifying the dirty water. (See before and after treatment below.)



# ChitoVan™ *chitosan lactate cartridge*

## APPLICATIONS

ChitoVan is a versatile polymer with a wide range of water treatment applications throughout the construction and industrial field.

### CONSTRUCTION

- *Stormwater Run-off*
- *Ground Water*
- *Dewatering*
- *Dredge Water*

### INDUSTRIAL

- *Urban and Industrial Stormwater Run-off*
- *Process Water*
- *Mining*
- *Agriculture*
- *Greywater*
- *Paper Manufacturing*
- *Food Processing*
- *Organic Wastes*

## PRODUCT SPECIFICATIONS

These specifications describe some of the necessary characteristics for the ChitoVan Chitosan Lactate product required to achieve the end objectives of water treatment.

### ChitoVan Chitosan Lactate Flake -

Viscosity range: 150 cps (1% solution @ standard temperature and pressure after 2 hours of mixing)  
 pH (1% solution): 3.5 to 4.0  
 Solids content: < 1.5%  
 Turbidity: 10 NTU or less  
 Solubility: > 99%

### Ingredients -

ChitoVan Chitosan Lactate is a water treatment grade of chitosan lactate. There are no additional additives.

*Aquatic toxicity reports are available on request.*

## HOW MUCH WATER WILL CHITOVAN TREAT?

Chitosan lactate (lbs.)	Water Treated (gallons)	Dose (mg/l)
1 (Green or black cartridge)	240,000	0.5
	120,000	1
	60,000	2
2	480,000	0.5
	240,000	1
	120,000	2
4	961,000	0.5
	480,000	1
	240,000	2



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