

# ChitoVan™ chitosan acetate

FREE SAMPLES  
AVAILABLE



ChitoVan chitosan acetate 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 sand 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.

## GENERAL ACCEPTANCE

Chitosan-Enhanced Sand Filtration construction stormwater treatment with ChitoVan has been thoroughly tested through the Washington Department of Ecology and has been awarded a General Level Use Designation for batch, infiltration and flow-through treatment to **ALL** receiving waters of the state. ([www.ecy.wa.gov](http://www.ecy.wa.gov))

ECOLOGY REVIEWED  
AND APPROVED!!

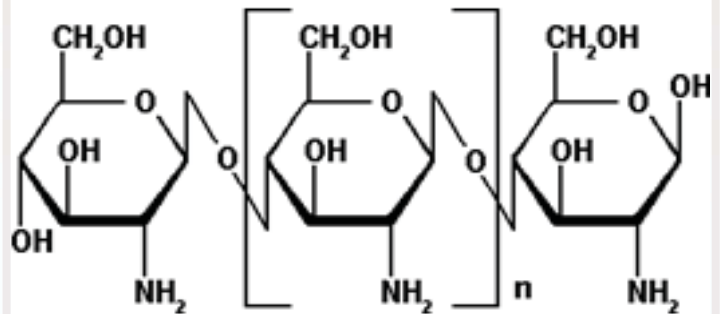


## PRODUCT AVAILABILITY

ChitoVan Chitosan Acetate is a clear viscous solution available in 1 % and 1.5 % concentrations. Dungeness Environmental offers ChitoVan Chitosan Acetate in 5-gallon buckets, 55-gallon drums and 275-gallon totes.

ChitoVan Chitosan products are available directly through Dungeness Environmental, located in Bothell, WA, 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. 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) these fine particles causing the sediment to settle thereby clarifying the dirty water. (See before and after treatment below.)



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## 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 ChitoVan solutions which are used in Chitosan-Enhanced Sand Filtration Systems and other applications.

### ChitoVan 1% - chitosan acetate

Viscosity range: 600 cps - 1200 cps (initial production)  
 pH: 3.0 to 4.0  
 Solids content: 0.9 to 1.1%  
 Turbidity: 70 NTU or less

### ChitoVan 1.5% - chitosan acetate

Viscosity: 2000 cps minimum (initial production)  
 pH: 3.0 to 4.0  
 Solids content: 1.4 to 1.6%  
 Turbidity: 100 NTU or less

*Aquatic toxicity reports are available on request.*

## HOW MUCH WATER WILL CHITOVAN TREAT?

Chitosan Acetate (lbs.)	Water Treated (gallons)	Dose (mg/l)
0.4 (5-gal bucket 1%)	96,000	0.5
	48,000	1
4.6 (55-gal barrel 1%)	1,105,000	0.5
	552,000	1
	276,000	2
23 (275-gal tote 1%)	5,525,000	0.5
	2,762,000	1
	1,381,000	2
	691,000	4



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