

MATERIAL SAFETY DATA SHEET

1. Product Name/Identification

ChitoVan™ Clear Trax 450

2. Composition

Active Ingredient: Chitosan Lactate (granular) – 40-80%	CAS # 90-12-76-4
Chemical name(s):	Chitosan Lactate (chitosan and lactic acid)
Lactic Acid	CAS # 598-82-3 2-Hydroxypropanoic acid – milk acid
Flocculants – Trade Secret 20-60%	
Source:	Chitosan extracted from recycled crab and shrimp shells

3. Physical/Chemical Properties

Appearance and Odor:	Dry oatmeal-like flakes.
Solubility:	Partially soluble in water
Specific Gravity:	0.4 – 0.8 grams/cubic centimeter
Boiling Point:	NA

4. Toxicological Data

Acute oral, LD50 (mice)	Not Available
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5. Ecological Information

LOEC (for Rainbow trout – most sensitive species)	75 mg/l
NOEC (for Rainbow trout – most sensitive species)	37.5 mg/l
LC50 (for Rainbow trout – most sensitive species)	50.4 mg/l

6. Fire and Explosion Hazard Data

Flash Point:	n/a
Flammability:	Non-flammable
Unusual Fire and Explosion Hazards:	In the form of a solid or water solution, there is no danger of fire or explosion.
Fire Fighting Media:	Use water or foam (not flammable in nature)

7. Health Hazards Information

Acute Health Effects – Signs and Symptoms of Exposure, Emergency and First Aid Procedures:	Eye Contact: Clear Trax 450 may be irritating to eyes. Flush with water for 15 minutes to remove and call a physician. Skin Contact: Clear Trax 450 is not hazardous but cleansing the skin after use is advisable. Inhalation: If a large amount of dust is inhaled remove to fresh air and call a physician. Ingestion: If swallowed, no specific intervention is indicated as the compound is not likely to be hazardous by ingestion. However, consult a physician if necessary.
Potential Chronic Health Effects:	There is no known effect from chronic exposure to this product
Carcinogenicity:	Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA

8. Personal Protective Equipment

Respiratory Protection:	Dust mask recommended when handling.
Protective Gloves:	Not needed.
Eye Protection:	Safety glasses are recommended.
Other Protective Clothing:	Not needed.

9. Regulatory

TSCA:	Not listed on the TSCA inventory.
OSHA:	Not considered hazardous.

EPA:	Exempt from EPA code.
SARA Section 302:	Does not have an RQ or TPQ.
SARA Section 313:	Not reportable under Section 313.
RCRA	Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a waste material containing the product, or derived from the product should be classified as a hazardous waste.

10. Storage, Handling and Disposal

Storage:	Store away from strong oxidizers.
For Spills:	Utilize protective clothing. Sweep up spilled Clear Trax 450 and dilute residual dust with water and hose down.
Waste Disposal Method:	Land disposal is acceptable as the compound is biodegradable. Follow local, state and federal regulations.
Work/Hygiene Practices:	Follow good hygienic and housekeeping practices. Clean up areas where Clear Trax 450 was used.

11. Transportation Information

DOT Shipping Name:	Chitosan Lactate
Technical Shipping Name:	Chitosan Lactate
DOT Hazard Class	Class 55, not regulated
Product RQ (lbs):	None
DOT Label:	None
DOT Placard:	None required
Product Label:	Clear Trax 450

12. Stability and Reactivity

Chemical Family:	Natural polysaccharide and proprietary flocculants
Stability:	Stable
Hazardous Polymerization:	Polymerization will not occur.
Incompatibility:	Incompatible with strong oxidants and strong bases.
Decomposition:	Decomposition will not occur.
Instability Conditions:	Stable at normal temperatures and storage conditions.
Decomposition Temperature:	NA
Decomposition Products:	NA

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