

Date: 8/15/2008 Revision: 02

Material Safety Data Sheet

SeaKlear: PRS - Stage One

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Manufacturer's Name: HaloSource, Inc.

Corporate Address: 1631 220th St. SE, Suite 100, Bothell, WA 98021 **Manufacturer's Telephone:** (425) 881-6464 (Monday-Friday, 8AM-5PM PDT)

Emergency Telephone: 800-424-9300 Chemtrec (24 Hours)
Material/Trade/Product Name: SeaKlear: PRS – Stage One

Synonyms: PRS – Stage One PRS 1, PRS I, Test Polymer A Chemical Name: Chitosan Proprietary Formula

Chemical Formula: Not available EPA Registration #: Not applicable CAS No.: 87582-10-3

Product Use: Swimming pool water treatment.

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

CAS NO.	COMPONENT	%	OSHA HAZARDOUS?
64-19-7	Acetic Acid	1	YES
	All other components are non-hazardous.	99	NO

NOTE: See Section 8 for permissible exposure limits.

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Clear to pale yellow viscous liquid with a pungent vinegar odor.

This material presents little or no health hazards, environmental hazards, and no unusual hazard if involved in a fire.

POTENTIAL HEALTH EFFECTS

EYE: May be mildly irritating to eyes.

SKIN: Not hazardous to skin.

INHALATION: Vapors may be mildly irritating to the respiratory tract.

INGESTION: May be mildly harmful if swallowed.

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CHRONIC EXPOSURE/CARCINOGENICITY: This substance is not listed as a potential carcinogen by IARC.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: Stinging, burning, coughing if inhaled. May irritate eyes with stinging, watering, inflammation; may cause chemical burns to eyes and surrounding tissue. May irritate skin with stinging, drying, inflammation. May irritate gastrointestinal system if ingested.

AGGRAVATION OF PRE-EXISTING CONDITIONS: None known.

POTENTIAL ENVIRONMENTAL EFFECTS: This material is readily biodegradable.

SECTION 4: FIRST AID MEASURES

FIRST AID PROCEDURES

EYE CONTACT: Remove contact lenses if worn and flush eyes with copious amounts of water or buffered saline eye wash solution. Get immediate medical attention.

SKIN CONTACT: Remove contaminated clothing and wash contact area with mild soap and plenty of water.

INHALATION: Remove person to fresh air and treat symptomatically. Get medical attention if symptoms worsen.

INGESTION: Get immediate medical attention.

NOTE TO PHYSICIANS: None.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT: Not available
UPPER FLAMMABLE LIMIT: Not available
LOWER FLAMMABLE LIMIT: Not available

FLAMMABLITY CLASS (OSHA): Not applicable FLAME PROPAGATION/BURNING RATE: Not available

UNIQUE FIRE PROPERTIES: None known.

HAZARDOUS COMBUSTION PRODUCTS: None known.

EXTINGUISHING MEDIA: Does not burn. Use water, dry chemicals, carbon dioxide, sand or foam. Use extinguishing media appropriate for surrounding fire.

PROTECTION OF FIREFIGHTERS: Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coat, gloves and rubber boots), including a positive pressure NIOSH approved self-contained breathing apparatus. Water may be used to keep fire-exposed containers cool until fire is out.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTIVE EQUIPMENT: See Section 8 (Personal Protective Equipment).

ENVIRONMENTAL PRECAUTIONS: Material is 100% biodegradable, is nontoxic and can be disposed of in any approved manner. Treatment, storage, transportation and disposal must be in accordance with applicable federal, state, and local regulations.

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METHODS FOR CLEANING UP: Dilute with water and hose down.

SECTION 7: HANDLING AND STORAGE

SAFE HANDLING RECOMMENDATIONS

VENTILATION: Use with adequate ventilation.

FIRE PREVENTION: Material will not burn.

SPECIAL HANDLING REQUIREMENTS: Wash hands thoroughly after handling.

SAFE STORAGE RECOMMENDATIONS

CONTAINMENT: Keep container closed when not in use.

STORAGE ROOM RECOMMENDATIONS: 10-50°C (will freeze @ ~ 3°C)

INCOMPATIBLE MATERIALS: Strong oxidizing materials and strong bases.

STORAGE CONDITIONS: Shelf life is indefinite, but viscosity will decrease over time. The container should be kept covered to prevent contamination.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Good general ventilation should be sufficient to control airborne levels.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

EYE/FACE PROTECTION: Wear safety glasses with side shields (or goggles) and a face shield.

SKIN PROTECTION: Wear chemical resistant clothing.

HAND PROTECTION: Wear chemical-resistant gloves.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

GOOD HYGEIENE/WORK PRACTICES: Always follow good hygiene/work practices by avoiding vapors or mists and contact with eyes and skin. Thoroughly wash hands after handling and before eating or drinking. Always wear the appropriate PPE when repairing or performing maintenance on contaminated equipment.

EXPOSURE GUIDELINES

PERMISSIBLE EXPOSURE LIMITS							
INGREDIENT	OS	OSHA		WISHA		ACGIH (TLV)	
CAS NO.	TWA	STEL	TWA	STEL	TWA	STEL	
Not Applicable	Not	Not	Not	Not	Not	Not	
	Applicable	Applicable	Applicable	Applicable	Applicable	Applicable	

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

COLOR: Clear to pale yellow. SHAPE: Viscous liquid PHYSICAL FORM: Viscous liquid ODOR: Pungent vinegar

pH: 3.0 – 4.5 VAPOR PRESSURE: Not applicable

VAPOR DENSITY: Not applicable BOILING POINT: 211°F

MELTING POINT: Not available FREEZING POINT: Not available

SOLUBILITY IN WATER: Soluble **SPECIFIC GRAVITY OR DENSITY:** 1.0 – 1.1 g/mL

NOTE: These physical data are typical values based on material tested but may vary from sample to sample. Values should not be construed as a guaranteed analysis of any specific lot or as specifications.

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable

CONDITIONS TO AVOID: Strong oxidizing material and strong bases.

MATERIALS TO AVOID (INCOMPATIBILITY): Strong oxidizing material and strong bases.

HAZARDOUS DECOMPOSITION PRODUCTS: Decomposition will not occur.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

ORAL LD₅₀ (rat): Not available.

DERMAL LD₅₀ (rabbit): Not available.

SKIN IRRITATION: Not available.

EYE IRRITATION: Not available.

SKIN SENSITIZATION: Not available.

ADDITIONAL INFORMATION:

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY: Not available.

MOBILITY: Not available.

PERSISTENCE AND DEGRADABILITY: Not available.

BIOACCUMULATIVE POTENTIAL: Not available.

ADDITIONAL INFORMATION: Not available.

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SECTION 13: DISPOSAL CONSIDERATIONS

If this product as supplied becomes a waste, it <u>does not</u> meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

NOTE: Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate.

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (DOT):

Proper Shipping Name:
Hazard Class:
Identification Number (UN Number):
Packing Group (PG):

Not Regulated
Not Regulated
Not Regulated

SECTION 15: REGULATORY INFORMATION

TSCA STATUS: All ingredients are listed

CERCLA REPORTABLE QUANTITY (RQ):

CHEMICAL NAME	RQ
None	Not applicable

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (EHS):

CHEMICAL NAME	TPQ	RQ
Not applicable	Not applicable	Not applicable

SARA TITLE III SECTION 311/312 HAZARD CATEGORIES: Does this product/material meet the definition of the following hazard classes according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of SARA Title III?

ACUTE HEALTH	CHRONIC HEALTH	FIRE HAZARD	REACTIVE HAZARD	SUDDEN RELEASE
HAZARD	HAZARD			OF PRESSURE
NO	NO	NO	NO	NO

SARA TITLE III SECTION 313 TOXIC CHEMICALS INFORMATION:

CHEMICAL NAME	CAS NO.	CONCENTRATION (%)
Not applicable	Not applicable	Not applicable

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CALIFORNIA PROPOSITION 65: The following chemical(s) is/are known to the state of California to cause cancer or reproductive toxicity:

CHEMICAL NAME	CAS NO.	CONCENTRATION (%)
Not applicable	Not applicable	Not applicable

SECTION 16: OTHER INFORMATION

REVISION INFORMATION:

MSDS sections(s) changed since last revision of document: Section 2 – Components updated.

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