

Product HSI 340
 Revision Date 05/29/2015
 Revision I



Safety Data Sheet

SECTION 1: IDENTIFICATION

Product Name	HSI 340
Identifier Uses	Cooling Water Treatment.
Supplier	Heritage Systems, Inc. 2471 Solano Ave, Suite 141 Napa, CA. 94558 Tel: 707-258-0553
Contact Person	services@heritagesystemsinc.com
Emergency Telephone	24-HOUR EMERGENCY TELEPHONE: INFOTRAC: 1-800-535-5053

SECTION 2: HAZARDS IDENTIFICATION

Appearance	Clear, pale yellow liquid.
Color	Clear, pale yellow liquid.
Odor	Odorless.
Pictogram(s)	
Signal Word	Danger
Hazard Statements	H314 Causes severe skin burns and eye damage H336 May cause drowsiness or dizziness.
Precautionary Statements	P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ protective clothing/eye protection/face protection. P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/physician
Contains	phosphonic acid Propan-2-ol isopropyl alcohol isopropanol
GHS Classification	
Physical and Chemical Hazards	Not classified
Human Health	Skin Corr. 1C - H314, STOT SE 3 - H336
Environment	Not classified
OSHA Regulatory Status	This product is Hazardous under the OSHA Hazard communication Standard.
Inhalation	Inhalation is not believed to be a likely route of exposure.
Ingestion	Exposure to liquid product may cause slight to moderate irritation to inner linings of mouth, esophagus and gastrointestinal tract, and possible burns. Do NOT ingest.
Skin contact	Exposure to product may cause moderate to severe irritation to skin, and possible burns. Symptoms of exposure may include redness, swelling, blisters or pain. Avoid contact.
Eye contact	Exposure to liquid product may cause moderate to severe irritation to eyes, and possible burns. Symptoms of exposure may include redness, swelling, tearing or pain. Avoid contact.
Routes of Exposure	No Information available.

SECTION 3: Composition/Information on Ingredients

Composition Comments	Confidential business information has been removed without affecting the overall safety information on the safety data sheet.
----------------------	---

SECTION 4: FIRST AID MEASURESDescription of first aid measures

General Information	General first aid, rest, warmth and fresh air.
Inhalation	If this product is Inhaled, move the exposed person to fresh air promptly. Seek medical attention if symptoms persist.
Ingestion	Never give anything by mouth to an unconscious person. If this product is ingested, drink small amounts of water and seek medical attention promptly.
Skin contact	If the product penetrates the clothing, promptly remove the contaminated clothing or shoes, and flush the affected area as described. Seek medical attention if irritation persists. If this product contacts the skin, immediately flush the affected area with plenty of clean running water for at least fifteen (15) minutes.
Eye contact	If the product contacts the eyes, immediately flush eyes with plenty of clean running water for at least fifteen (15) minutes, lifting the upper and lower eyelids occasionally. Remove contact lenses if worn. Seek medical attention if irritation persists.

Most important symptoms and effects, both acute and delayed

General Information	
Inhalation	Inhalation is not believed to be a likely route of exposure.
Ingestion	Exposure to liquid product may cause slight to moderate irritation to inner linings of mouth, esophagus and gastrointestinal tract, and possible burns. Do NOT ingest.
Skin contact	Exposure to product may cause moderate to severe irritation to skin, and possible burns. Symptoms of exposure may include redness, swelling, blisters or pain. Avoid contact.
Eye contact	Exposure to liquid product may cause moderate to severe irritation to eyes, and possible burns. Symptoms of exposure may include redness, swelling, tearing or pain. Avoid contact.
Routes of Exposure	No Information available.

Most important symptoms and effects, both acute and delayed

Notes To The Physician	Provide general supportive measures and treat symptomatically.
------------------------	--

SECTION 5: Firefighting Measures

Auto Ignition Temperature (° C)	No Information available.
Flammability Limit - Lower (%)	No Information available.
Flammability Limit - Upper (%)	No Information available.
Flashpoint	No Information available.
Extinguishing Media	Use fire-extinguishing media appropriate for surrounding materials. Use water, foam, dry chemical or carbon dioxide to extinguish fire.
Hazardous combustion products	Combustion may lead to the release of oxides of carbon and possibly toxic phosphorus compounds.
Unusual Fire & Explosion Hazards	Dried residue can thermally decompose, giving off irritating and possibly toxic fumes.
Special Fire Fighting Procedures	Use water to cool containers exposed to a fire.
Protective equipment for fire-fighters	Fire fighters should wear full protective equipment, and have self-contained breathing apparatus available.

SECTION 6: Accidental Release Measures

Personal Precautions	For personal protection see section 8.
Environmental Precautions	Run off from fire control or dilution water may cause pollution. Keep out of drains, municipal sewers, open bodies of water and water course.
Spill Clean Up Methods	Safely stop source of spill. Clean up spills immediately. Restrict non-essential personnel from the area. Wear protective clothing, goggles and respirator if ventilation is not adequate. Dike spill area and soak up material with dry soil, sand or other absorbent. Place into chemical waste container for disposal according to local, state or federal regulations. Neutralize residue with lime or soda ash and flush spill area.

SECTION 7: Handling and Storage

Handling	Use proper personal protection when handling (refer to Section 8). Use under well-ventilated conditions. Avoid contact with eyes, skin and clothing. Avoid breathing vapors and mists. Avoid prolonged or repeated contact. Do NOT ingest. Wash thoroughly after handling. Rinse container before disposal.
Usage Description	Use only according to directions.
Storage Precautions	The recommended shelf life is two (2) years. It is recommended that products be retested if stored for more than two (2) years. Under ideal storage conditions, the shelf life is almost indefinite.
Specific End Use(s)	The identified uses are in section I of this Safety Data Sheet.

SECTION 8: Exposure Controls/Personal Protection

Protective Equipment



Component	STD	TWA (8 Hrs.)		STEL (15mins)		Notes
propan-2-ol isopropyl alcohol isopropanol	OSHA	400ppm	980mg/m3			

Ingredient Comments

OSHA

Process Conditions

Provide eyewash, quick drench.

Engineering Measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Respiratory Equipment

Use of respirator protection is not generally required. However, if exposure is above the stated limits or ventilation is inadequate; use a NIOSH approved acid gas/organic vapor respirator to reduce potential for inhalation exposure. When using respirator cartridges, they must be changed frequently to assure breakthrough exposure does not occur.

Hand Protection

When handling this product, it is recommended to wear chemical resistant gloves. The choice of suitable protective gloves depends on work conditions and what chemicals are handled, but we have positive experience with gloves made of Rubber.

Eye Protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Hygiene Measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

SECTION 9: Physical and Chemical Properties**Information on Basic Physical and Chemical Properties**

Appearance	Clear, pale yellow liquid.
Color	Clear, pale yellow liquid.
Odor	Odorless.
Odor Threshold - Lower	No Information available.
Odor Threshold - Upper	No Information available.
pH-Value, Conc. Solution	1.6
Melting point	32.0 °F
Initial boiling point and boiling range	212.0 °F

Flashpoint	No Information available.
Evaporation rate	No Information available.
Flammability State	No Information available.
Flammability Limit–Lower (%)	No Information available.
Flammability Limit–Upper (%)	No Information available.
Vapor pressure	23.8 mm Hg 0.0
Vapor Density (air=1)	No Information available.
Relative density	1.07 @ 68.0 °F
Bulk Density	No Information available.
Solubility	Completely soluble in water.
Decomposition temperature	No Information available.
Partition coefficient; n-octanol/water	No Information available.
Auto Ignition Temperature (° C)	No Information available.
Viscosity	No Information available.
Explosive Properties	No information available.
Oxidizing Properties	No Information available.
Molecular Weight	No Information available.
Volatile Organic Compound	No Information available.

SECTION 10: Stability and Reactivity

Reactivity	Reactions may occur with strong alkalis and oxidizing materials.
Stability	This product is very stable at high temperature.
Hazardous Polymerization	Hazardous polymerization is not expected to occur under normal temperatures and pressures.
Hazardous Decomposition Products	Hazardous combustion results in oxides of carbon and possibly toxic phosphorus compounds.
Conditions to Avoid	Avoid exposing to heat and contact with strong alkali and oxidizing materials.
Materials to Avoid	Avoid contact with strong alkali and oxidizing materials.

SECTION 11: Toxicological Information

Toxicological Information	No toxicological information for the overall finished product.
Acute Toxicity (Oral LD50)	>2401.00mg/kg Rat
Acute Toxicity (Dermal LD50)	>1295.00mg/kg Rabbit
Acute Toxicity (Inhalation LC50)	No Information available.
Skin Corrosion/Irritation	No Information available.
Respiratory Sensitization	No Information available.
Skin Sensitization	No Information available.
Reproductive Toxicity:	No Information available.
Germ Cell Mutagenicity:	
Genotoxicity - In Vitro	
Genotoxicity - In Vivo	

Carcinogenicity: No Information available.
 Carcinogenicity: The product and its components are not listed.
 NTP - Carcinogenicity: The product and its components are not listed.
 OSHA - Carcinogenicity: The product and its components are not listed.
 IARC Carcinogenicity: propan-2-ol isopropyl alcohol isopropanol: 3 IARC Group 3 Not classifiable as to its carcinogenicity to humans.

Specific Target Organ Toxicity - Single Exposure:
 STOT - Single Exposure: No Information available.
 Specific Target Organ Toxicity - Repeated Exposure:
 STOT - Repeated Exposure: No Information available.

Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Benzotriazole	675mg/kg Rat	>2000mg/kg Rabbit	
propan-2-ol isopropyl alcohol isopropanol	5480mg/kg Rat	13000mg/kg Rabbit	

SECTION 12: Ecological Information

Ecotoxicity: No Information available.

Acute Toxicity - Fish: LC50 96 Hours >3870.00ppm Onchorhynchus mykiss (Rainbow Trout)
 Acute Toxicity - Aquatic Invertebrates: LC50 48 Hours >2585.00ppm Daphnia magna

Acute Toxicity - Aquatic Plants: EC50 72 Hours >2130.00ppm

Degradability: No information available.

Bioaccumulative Potential: No data available on bioaccumulation.

Mobility: Completely soluble in water.

Results of PBT and vPvB Assessment: The product does not contain any PBT or vPvB Substances.

Other Adverse Effects: None known.

Name	Acute Toxicity (Fish)	Acute Toxicity (Aquatic Invertebrates)	Acute Toxicity (Aquatic Plants)
Benzotriazole	LC50 96 Hours 21.40mg/l Onchorhynchus mykiss (Rainbow Trout)		

SECTION 13: Disposal Considerations

Waste Management: When handling waste, consideration should be made to the safety precautions applying to handling of the product.

Disposal Methods: Do NOT dump into any sewers, on the ground or into any body of water. Rinse containers before disposal. Since emptied containers contain product residue, follow label warnings even after container is emptied. Dispose in accordance with all applicable federal, state and local laws and regulations.

SECTION 14: Transport Information

UN No. (DOT/TDG): 3265 - CORROSIVE LIQUID, ACIDIC, ORGANIC, (Hydroxyethylidene diphosphonic acid)

UN No. (IMDG): 3265 - CORROSIVE LIQUID, ACIDIC, ORGANIC, (Hydroxyethylidene diphosphonic acid)

UN No. (ICAO): 3265 - Corrosive liquid, acidic, organic (Hydroxyethylidene diphosphonic acid)

DOT Proper Shipping Name: 3265 - CORROSIVE LIQUID, ACIDIC, ORGANIC, (Hydroxyethylidene diphosphonic acid)

TDG Proper Shipping Name: 3265 - CORROSIVE LIQUID, ACIDIC, ORGANIC, (Hydroxyethylidene diphosphonic acid)

DOT Hazard Class	8
DOT Hazard Label	Class 8 - Corrosive
TDG Class	8
TDG Label(s)	8
IMDG Class	8
ICAO Class	8

Transport Labels



DOT Pack Group	II
IMDG Pack Group	II
Air Pack Group	II
EMS	F-A, S-B
Environmentally Hazardous Substance/Marine Pollutant	No

SECTION 15: Regulatory Information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

The Following ingredients are listed None Listed.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

The Following ingredients are listed None Listed.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

The Following ingredients are listed None Listed.

SARA 313 Emission Reporting

The Following ingredients are listed propan-2-ol isopropyl alcohol isopropanol

CAA Accidental Release Prevention

The Following ingredients are listed None Listed.

OSHA Highly Hazardous Chemicals

The Following ingredients are listed None Listed.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

The Following ingredients are listed None Listed.

California Air Toxics "Hot Spots" (A-I)

The Following ingredients are listed None Listed.

California Air Toxics "Hot Spots" (A-II)

The Following ingredients are listed None Listed.

Massachusetts "Right To Know" List

The Following ingredients are listed benzotriazole
propan-2-ol isopropyl alcohol isopropanol

Rhode Island "Right To Know" List

The Following ingredients are listed propan-2-ol isopropyl alcohol isopropanol

