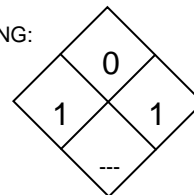


# HERITAGE SYSTEMS, INC

NFPA RATING:

4=Severe  
3=Serious  
2=Moderate  
1=Slight  
0=Minimal



## MATERIAL SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: **HSI-765 or 2465**  
PRODUCT DESCRIPTION: *Boiler Treatment*

COMPANY INFORMATION:  
**Chemicals Inc.**  
13560 Colombar Court  
Fontana, California 92337  
Non-emergency: 951-681-9697

Revised: October 26, 2006

**24-HOUR EMERGENCY TELEPHONE:**  
CHEMTREC 800-424-9300

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS #	HAZARD	WT %	ACGIH		OSHA	
				TLV <sub>(TWA)</sub>	STEL	PEL <sub>(TWA)</sub>	STEL
Sodium sulfite	7757-83-7	Irritant	10 – 15	NE	NE	NE	NE
Sodium metabisulfite	7681-57-4	Irritant	5 – 10	5 mg/m <sup>3</sup>	NE	NE	NE

Amounts specified are typical and do not represent a specification. Remaining components are proprietary, non-hazardous and/or present at amounts below reportable limits.

### 3. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW:

Clear, pink liquid  
Sulfite odor  
WARNING: May cause irritation to eyes and skin. May cause irritation to mucous membranes and respiratory tract. Avoid contact. Wear safety glasses and gloves when handling. Wash thoroughly after handling.

**POTENTIAL HEALTH EFFECTS**     Eye contact     Skin contact     Ingestion     Inhalation

**EYE CONTACT:** Exposure to liquid product may cause slight to moderate irritation to eyes. Symptoms of exposure may include redness, swelling, tearing or pain.

**SKIN CONTACT:** Exposure to liquid product may cause slight to moderate irritation to skin. Symptoms of exposure may include redness, swelling or pain.

**INGESTION:** Exposure to liquid product is not expected to result in significant adverse effects.

**INHALATION:** Inhalation of vapors or fumes may be irritating to mucous membranes and respiratory tract. Avoid contact.

**CHRONIC:** Effects of chronic exposure are not expected to differ from the above-mentioned contact.

**CARCINOGENS:** This product and its components are not listed on NTP, IARC or OSHA lists as cancer-causing agents. Sodium metabisulfite is listed in ACGIH Appendix A as a Group A4 (not classifiable as a human carcinogen) carcinogen.

**AGGRAVATION OF PRE-EXISTING CONDITIONS:** Can cause allergic reactions in some asthmatic or sulfite sensitive individuals.

#### 4. FIRST AID MEASURES

**EYE CONTACT:** If this 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.

**SKIN CONTACT:** If this product contacts the skin, immediately flush the affected area with soap and water for at least fifteen (15) minutes. 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.

**INGESTION:** If this product is ingested, drink small amounts of water and seek medical attention promptly. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** If this product is inhaled and symptoms occur, move the exposed person to fresh air promptly. Seek medical attention if symptoms persist.

**NOTES TO PHYSICIAN:** Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

#### 5. FIRE FIGHTING MEASURES

**FLASH POINT:** None – aqueous solution.

**FLAMMABLE LIMITS:** NA

**AUTOIGNITION TEMPERATURE:** NA

**EXTINGUISHING MEDIA:** Use water, foam, dry chemical or carbon dioxide to extinguish fire.

**FIRE/EXPLOSION HAZARD:** Irritating vapors may be emitted during a fire.

**FIRE FIGHTING EQUIPMENT:** Fire fighters should wear full protective equipment, and have self-contained breathing apparatus available.

**SPECIAL PROCEDURES:** Use water to cool containers exposed to a fire.

**HAZARDOUS COMBUSTION PRODUCTS:** Sulfur oxides.

#### 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** Use proper personal protection (refer to 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.

**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. Squeegee and collect the spillage or vacuum the spillage. Place collected spillage into containers for reuse or disposal. Dispose according to local, state or federal regulations at an approved chemical waste reprocessing facility. Neutralize spill area with lime or soda ash and flush with large amounts of water.

#### 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.

**SHELF LIFE:** 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.

**STORAGE TEMPERATURE:** The recommended storage temperature is above 32°F, preferably at room temperature (70°F).

**GENERAL:** Store closed containers in a cool, dry, well-ventilated area away from incompatible materials. This product is stable under normal conditions of handling and storage. Avoid cold temperatures.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTIVE EQUIPMENT

Please refer to Section 2 for applicable exposure limits.

**EYE PROTECTION:** To avoid contact with eyes, use safety glasses or chemical splash goggles. Face shield is recommended. Eye wash station should be available in the work area.

**HAND PROTECTION:** Use rubber or plastic gloves to minimize skin contact.

**BODY PROTECTION:** A rubber apron and boots are recommended to minimize contact. Full drench shower should be available in the work area.

**RESPIRATOR:** 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.

**VENTILATION:** General mechanical ventilation is recommended for enclosed areas.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Clear, pink liquid	<b>Boiling Point:</b>	100°C / 212°F
<b>Odor:</b>	Sulfite	<b>Freezing Point:</b>	0°C / 32°F
<b>Specific Gravity @ 68°F:</b>	~ 1.17	<b>Vapor Pressure:</b>	ND
<b>pH:</b>	~ 7.0	<b>Vapor Density (air = 1):</b>	ND
<b>Water Solubility:</b>	Complete	<b>VOC Content:</b>	Non-volatile

## 10. STABILITY AND REACTIVITY

**GENERAL STABILITY:** This product is stable at ambient temperatures and atmospheric pressures.

**INCOMPATIBLE MATERIALS:** Strong oxidizing materials and strong acids.

**HAZARDOUS POLYMERIZATION:** Hazardous polymerization is not expected to occur under normal temperatures and pressures.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Sulfur oxides.

## 11. TOXICOLOGICAL INFORMATION

Product 2465

Sodium sulfite

Sodium metabisulfite

<b>Eye irritation:</b>	Slight to moderate	Slight to moderate	Slight to moderate
<b>Skin irritation:</b>	Slight to moderate	Slight to moderate	Slight to moderate
<b>Inhalation irritation:</b>	Slight to moderate	Moderate to severe	Slight to moderate
<b>Oral LD<sub>50</sub>, Rat:</b>	> 500 mg/kg	820 mg/kg	1131 mg/kg
<b>Dermal LD<sub>50</sub>, Rabbit:</b>	NDA	NDA	NDA
<b>Inhalation LC<sub>50</sub>, Rabbit:</b>	NDA	NDA	NDA
<b>Other toxicological data:</b>	NA	NA	See below

**Sodium metabisulfite:** Can cause allergic reactions in some asthmatic or sulfite sensitive individuals. [Delayed (Subchronic and Chronic) Effects] Sodium sulfite has been demonstrated to be mutagenic in microbial systems; however, it is not mutagenic in studies involving insects and is not considered to present a mutagenic threat to multi-cell organisms.

## 12. ECOLOGICAL INFORMATION

	<u>Product 2465</u>	<u>Sodium sulfite</u>	<u>Sodium metabisulfite</u>
96 hr LC <sub>50</sub> , Rainbow trout:	> 390 mg/l	NDA	200 mg/l
48 hr LC <sub>50</sub> , Daphnia magna:	> 1210 mg/l	NDA	NDA
72 hr EC <sub>50</sub> , Algae:	> 150 mg/l	NDA	NDA

## 13. DISPOSAL CONSIDERATIONS

**US EPA RCRA Status:** This product is not considered to be a hazardous waste.  
**US EPA RCRA Hazardous waste code:** NA

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.

## 14. TRANSPORT INFORMATION

The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

**US DOT**  
**Proper Shipping Name:** Not DOT regulated  
**Hazard Class:** NA  
**Hazard Identification Number:** NA  
**Packing Group:** NA  
**Transport Label:** Scale Preventing/Scale Removing Liquid or Paste

## 15. REGULATORY INFORMATION

<b>Components:</b>	<u>Sodium sulfite</u>	<u>Sodium metabisulfite</u>
<b><u>Carcinogenic Potential</u></b>		
<b>Regulated by OSHA:</b>	No	No
<b>Listed on NTP Report:</b>	No	No
<b>Listed by IARC / Group:</b>	No	No
<b>ACGIH Appendix A / Group:</b>	Not listed	Listed / A4
<b><u>US EPA Release Reporting</u></b>		
<b><u>CERCLA (40 CFR 302):</u></b>		
<b>Listed substance:</b>	Not listed	Not listed
Reportable quantity:	NA	NA
Category:	NA	NA
RCRA waste number:	NA	NA
<b>Unlisted substance:</b>	NA	NA
Reportable quantity:	NA	NA
Characteristic:	NA	NA
RCRA waste number:	NA	NA

### SARA TITLE III

**Section 302 & 303** (40 CFR 355):

**Listed substance:**

Reportable quantity:

Planning threshold:

Not listed

NA

NA

Not listed

NA

NA

**Section 311 & 312** (40 CFR 370):

Hazard categories:

Planning threshold:

Acute, chronic

10000 lbs.

Acute

NDA

**Section 313** (40 CFR 372):

**Listed toxic chemical:**

Reporting threshold:

Not listed

NA

Not listed

NA

**US TSCA**

**Listed/Exempt** (40 CFR 710):

Yes

Yes

**CA PROP 65**

Carcinogen:

Reproductive toxin:

No

No

No

No

**16. OTHER INFORMATION**

**HMIS Rating**

HEALTH	1
FLAMMABILITY	0
REACTIVITY	1
PROTECTION	B

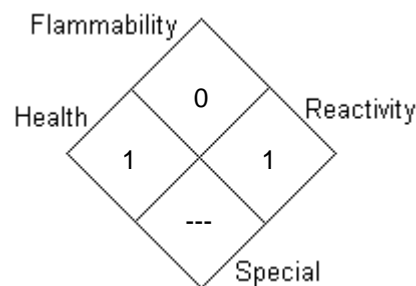
B = Safety glasses, gloves

**KEY**

4 = Severe  
3 = Serious  
2 = Moderate  
1 = Slight  
0 = Minimal

ACID = Acid  
ALK = Alkali  
COR = Corrosive  
OX = Oxidizer  
W = Use NO WATER

**NFPA Rating**



**Legend:**

ACGIH: American Conference of Governmental Industrial Hygiene  
A1: Confirmed human carcinogen  
A2: Suspected human carcinogen  
A3: Confirmed animal carcinogen  
CAS #: Chemical Abstract Service Registry number  
CERCLA: Comprehensive Environmental Response Compensation and Liability Act  
DOT: Department of Transportation  
EPA: Environmental Protection Agency  
HMIS: Hazardous Materials Identification System  
IARC: International Agency for Research on Cancer  
Group 1: Carcinogenic to humans  
Group 2A: Probably carcinogenic to humans  
Group 2B: Possibly carcinogenic to humans  
Group 3: Unclassified as carcinogenic to humans  
NA or N/A: Not applicable  
ND: Not determined  
NDA: No data available

NE: Not established  
NFPA: National Fire Protection Association  
NIOSH: National Institute for Occupational Safety and Health  
NTP: National Toxicology Program  
OSHA: Occupational Safety and Health Administration  
PEL: Permissible Exposure Limit  
RCRA: Resource Conservation and Recovery Act  
REL: Recommended Exposure Limit  
SARA TITLE III: Superfund Amendments and Reauthorization Act  
STEL: Short Term Exposure Limit (15 minute Time Weighted Average)  
TLV: Threshold Limit Value  
CEIL (C): Ceiling Exposure Limit  
TSCA: Toxic Substance Control Act  
TWA: Time Weighted Average  
VOC: Volatile Organic Compound  
> / <: Greater than / Less than  
~: Approximately

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