

MATERIAL SAFETY DATA SHEET

BT-316

PRODUCT NAME: BT-316

PAGE NUMBER: 1 OF 4

MSDS NUMBER: 082205BT316

PRODUCT CODE: Boiler Water Treatment

EMERGENCY PHONE #'S: 800-255-3924 (CHEMTEL)

MSDS DATE: 08/22/2005



Advanced Chemical Technology, Inc.
 8728 Utica Avenue, Rancho Cucamonga, CA 91730 USA
 Phone (800) 527-9607 / Fax (909) 980-9366
 Web: <http://www.actglobal.net> Email: act@actglobal.net

HEALTH

1 Hazardous

FLAMMABILITY

0 Will Not Burn

REACTIVITY

0 Stable

Personal Protection

C

1. IDENTIFICATION

Chemical Name: BT-316
Chemical Family: Boiler Water Treatment
DOT Information: Corrosive

2. PHYSICAL DATA

Appearance: Dark Amber Liquid	Vapor Pressure: 23.75 mmHg
Odor Characteristics: Bland	Boiling Point: 212 F
pH: > 12.5	Freezing Point: ND
Viscosity: ND	Evaporation Rate (Water = 1): 1
Specific Gravity (Water = 1): 1.126	Solubility in Water: Soluble
Vapor Density (Air = 1): 0.62 @ 68 F	

3. INGREDIENTS – HAZARDOUS

Components	CAS No.	OSHA PEL	ACGIH TLV	Approx %
Potassium Hydroxide	1310-58-3	2 mg/M ³	2 mg/M ³	< 8
Hydroxyethylidene diphosphonic acid	2809-21-4	NE	NE	< 10
Sodium Sulfite	7757-83-7	NE	NE	< 10

4. FIRE AND EXPLOSION HAZARD DATA

Flash Point: NA
Flammable Limits in Air % by volume: Lower NA Upper NA
Extinguishing Media: Water spray, carbon dioxide, dry chemical, foam for fires in storage areas
Special Fire Fighting Procedures: Keep containers cool with water spray. Firefighters should wear self-contained breathing apparatus and wear full protective clothing
Unusual Fire & Explosion Hazards: Dried residue can thermally decompose, giving off irritating and potentially toxic fumes

5. HEALTH HAZARD DATA

Effects of Overexposure:

Inhalation: Mists is irritating to the nose, throat, and mucous membranes
Skin Contact: Causes skin irritation. A single prolonged exposure is unlikely to result in harmful quantities being absorbed
Eye Contact: Liquids and mists can severely irritate or damage the eyes and cause corneal burns
Ingestion: This material is irritating to the mouth and throat
Delayed Effects: Prolonged contact may cause severe burns
Medical Conditions Aggravated by Exposure: Persons with pre-existing skin disorders, eye problems, or impaired respiratory functions may be more susceptible to the effects of this substance



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6. FIRST AID MEASURES

- Inhalation:** If breathing stops, give artificial respiration. Call a physician immediately
- Skin Contact:** Immediately remove clothing under a safety shower. Flush all affected areas with large amounts of water for at least 15 minutes
- Eye Contact:** Immediately flush the eyes with large quantities of running water for a minimum of 15 minutes. Obtain medical attention immediately
- Ingestion:** Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting. Give large quantities of water. (If available, give several glasses of milk.) If vomiting occurs spontaneously, keep airway clear and give more water. GET MEDICAL ATTENTION IMMEDIATELY.

Notes to Physician: None

7. REACTIVITY DATA

- Stability:** Stable
- Incompatibility:** Compatible with most boiler water treatment compounds at use dosages.
- Hazardous Combustion or Decomposition Products:** Carbon monoxide, carbon dioxide, ammonia, and oxides of nitrogen
- Hazardous Polymerization:** Will not occur
- Conditions to Avoid:** Do not mix with other industrial chemicals

8. SPILL OR LEAK PROCEDURES

- Personal Precautions:** Wear goggles, gloves, rubber boots
- Environmental Precautions:** Keep out of sewers, drains, surface waters, and soil
- Method for Cleanup:** For small spills mop or wipe up. For large spills, contain by diking with soil or other absorbent material.

9. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Respiratory Protection:** NIOSH approved respirator in the absence of adequate environmental controls at the point of use
- Eye Protection:** Chemical goggles and face shield.
- Skin Protection:** Rubber gloves
- Other Clothing:** Rubber apron and protective clothes
- Other Equipment:** Eye wash station and safety shower
- Engineering Controls:** Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits



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10. HANDLING AND STORAGE

Special Precautions: Do not get in eyes, on skin, or on clothing. Local mechanical exhaust ventilation capable of maintaining emissions at the point of use below the PEL

Other Precautions: An eyewash and safety shower should be nearby and ready for use. Rinse container before disposal

11. REGULATORY INFORMATION

RCRA Status: D002

CERCLA Status: Reportable Quantity for Potassium Hydroxide: 1000 lbs.

SARA/Title III – Section 302 Emergency Planning Notification/Threshold Planning Quantities

This product does not contain a Section 302 substance subject to Emergency Planning Notification/Threshold Planning Quantities

SARA/Title III – Section 304 Emergency notification reporting.

This product contains a Section 304 listed hazardous substance for emergency release notification

SARA/Title III – Section 311/312 Hazardous Categories

Acute

SARA/Title III – Section 313 Toxic chemical release reporting

This product does not contain a Section 313 listed toxic chemical subject to release reporting requirements

TSCA Inventory Status

All chemical components are listed on TSCA Inventory.

California Proposition 65 Status

This product does not contain chemicals currently on the California list of know carcinogens and/or reproductive toxins

12. TOXICOLOGICAL INFORMATION

Acute Data: This product has a low order of toxicity

Reproductive / Teratology Data NE

13. ECOLOGICAL INFORMATION

Fate in the Environment: Ingredients will degrade over a 60 day period with exposure to oxygen and sunlight

14. DISPOSAL CONDITIONS

Procedures: Dispose of all waste according to Federal, State, and Local regulations

15. TRANSPORTATION 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: Caustic alkali liquid, n.o.s. (contains potassium hydroxide)

Hazard Class: 8

Hazard Identification Number: UN 1719

Packaging Group: II

Transport Label: Corrosive



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16. OTHER INFORMATION

A. Suggested NFPA Rating:			
<u>Health</u>	<u>Fire</u>	<u>Reactivity</u>	<u>Specific Hazard</u>
1	0	0	ALK
Health Hazard (Blue)	Fire Hazard (Red)	Reactivity (Yellow)	Specific Hazard (White)
4- Deadly 3- Extremely Hazardous 2- Hazardous 1- Slightly Hazardous 0- Non Hazardous	Flash Points 4- Below 73 F 3- Below 100F 2- Below 200 F 1- Above 200 F 0- Will Not Burn	4- May detonate 3- Shock & heat may detonate 2- Violent chemical change 1- Unstable if heated 0- Stable	OX Oxidizer ACID Acid ALK Alkali COR Corrosive

B. Suggested HMIS Rating:			
<u>Health</u>	<u>Fire</u>	<u>Reactivity</u>	<u>Protective Equipment Guide</u>
1	0	0	C
Health Hazard (Blue)	Fire Hazard (Red)	Reactivity (Yellow)	Protective Equipment Guide (White)
4- Extreme: Highly Toxic. May be fatal on short term exposure. Protective equipment required.	4- Extreme: Extremely flammable gas or liquid. Flash Point below 73 F.	4- Extreme: Explosive at room temperature.	A- Safety glasses B- Safety glasses, gloves C- Safety glasses, gloves, protective apron
3- Serious: Toxic. Avoid inhalation or skin contact.	3- Serious: Flammable. Flash point 73 F to 100 F.	3- Serious: May explode if shocked, heated under confinement or mixed with water.	D- Face shield, gloves, protective apron E- Safety glasses, gloves, dust mask
2- Moderate: Moderately toxic. May be harmful if inhaled or absorbed.	2- Moderate: Combustible. Requires moderate heating to ignite. Flash Point 100F to 200F.	2- Moderate: Unstable, may react with water.	F- Safety glasses, gloves, protective apron, dust mask G- Safety glasses, gloves, vapor respirator
1- Slight: Slightly toxic. May cause slight irritation.	1- Slight: Slightly combustible. Requires strong heating to ignite.	1- Slight: May react if heated or mixed with water.	H- Splash goggles, gloves, protective apron, vapor respirator I- Safety glasses, gloves, dust and vapor respirator
0- Minimal: All chemicals have some degree of toxicity.	0- Minimal: Will not burn under normal conditions.	0- Normally stable: Does not react with water.	J- Splash goggles, gloves, protective apron, dust and vapor respirator K- Airline respirator, gloves, protective suit, boots X- Ask your supervisor for special handling instructions

NA = Not Applicable ND = Not Determined NE = Not Established

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