



1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: R-275 Hardness Buffer

Description: Test Reagent
Suggested Use: Industrial Water Treatment
Restrictions on Use: Do not mix with other industrial chemicals.

Supplier: Advanced Chemical Technology, Inc.
8728 Utica Avenue
Rancho Cucamonga, CA 91730

Telephone: 1-909-980-4556 or 1-800-527-9607
Fax: 1-909-980-9366

Emergency Phone: 1-800-255-3924 (CHEMTEL)

2. HAZARDS IDENTIFICATION

Classification

GHS Classification: Serious Eye Irritation (Category 2A)

GHS Label Elements

Pictogram:



Signal Word: Warning

Hazard Statements: H316: Causes mild skin irritation
H319: Causes serious eye irritation

Precautionary Statements: P264: Wash hands thoroughly after handling.
P 273: Avoid release to the environment.
P280: Wear protective gloves/ protective clothing/ eye protection.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical attention/advice.
P332+P313: If skin irritation occurs: Get medical advice/attention.
P501 - Dispose of contents/container to comply with local, state and federal regulations.

HMIS Classification: Health Hazard: 1
Flammability: 0
Physical Hazards: 0

NFPA Rating: Health Hazard: 1
Fire: 0
Reactivity Hazard: 0

Potential Health Effects

Inhalation: May be harmful if inhaled.



Skin: May cause skin irritation.
Eyes: Causes eye irritation.
Ingestion: May cause gastrointestinal irritation. Do not ingest.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS Number</u>	<u>Concentration</u>
Sodium borate	1303-96-4	Not Established
Synonyms:	Not Established	

4. FIRST AID MEASURES

If Inhaled: Remove person to fresh air, loosen tight clothing. Obtain medical attention if breathing is difficult.

Skin Contact: Flush all affected areas with large amounts of water for at least 15 minutes.

Eye Contact: Flush eyes with plenty of water for at least 15 minutes and consult a physician. Remove contact lenses if able to do so.

If Ingested: Do NOT induce vomiting unless instructed to do so by a physician. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES

Flammability Overview: Considered a non-flammable

Flash Point: Not Applicable

Extinguishing Media: Use water-spray, foam, dry chemical, or carbon dioxide.

Special Protective Equipment for Firefighters: Wear a self-contained breathing apparatus (SCBA) for firefighting if necessary.

Hazardous Combustion Products: Not Established

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protective equipment. Avoid breathing vapors, mist, or gas. Always ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Prevent from entering drains and waterways. Discharge into the environment must be avoided.

Containment and Clean Up: Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. If assistance is needed call CHEMTEL or emergency services.

7. HANDLING AND STORAGE



Safe Handling: Use personal protective equipment. Avoid breathing vapors, mist, or gas. Always ensure adequate ventilation.
Safe Storage: Store bottles tightly capped and upright. Keep in a cool, dry place away from direct sun light and heat. Store away from incompatible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

Table with 4 columns: Component, CAS Number, Exposure Limit, Basis. Row 1: Sodium borate, 64-02-8, Not Established, ACGIH Threshold Value (TWA) (mg/m³). Row 2: Not Established, OSHA PEL (TWA) (mg/m³).

Personal Protective Equipment

Eye Protection: Wear tightly fitting safety goggles or safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH.
Hand Protection: Handle with chemical-resistant gloves. Gloves must be inspected prior to use.
Skin Protection: Protect skin by wearing pants, close toe shoes and long sleeves.
Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate, use a NIOSH-approved full-face respirator.
General Controls: Always ensure adequate ventilation and that working areas contain safety showers and eye wash stations.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid
Color: Colorless
Odor: None
Odor Threshold: Not Established
pH: 9.6
Melting/Freezing Point: Not Established
Boiling Point: 212 °F
Flash Point: Not Established
Evaporation Rate: Not Established
Flammability (solid, gas): Not Flammable
Flammability/Explosion Limits: Not Flammable
Vapor Pressure @ 20°C: Not Established
Vapor Density: Not Established
Specific Gravity: 1.0



Density: Not Established
Solubility in Water: Complete
Partition Coefficient: Not Established
Autoignition Temperature: Not Established
Decomposition Temperature: Not Established
Viscosity: Not Established

10. STABILITY AND REACTIVITY

Chemical Stability: Stable under ordinary conditions of use and storage.
Conditions and Materials to Avoid: Do not mix with other industrial chemicals
Hazardous Decomposition Products: Not Established

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component	CAS Number	Test	Toxicity
Sodium borate	1303-96-4	Oral LD50 (Mouse)	Not Established
		Skin	Not Established
		Inhalation LC50-1H (Rat)	Not Established

Potential Health Effects

Inhalation: Dust may cause nasal irritation and sneezing
Skin: Moderately irritating. Dehydrating effect and allergic reactions may occur for some sensitive people on prolonged skin contact.
Eyes: Irritating to eyes. Particles in eyes may cause severe irritation and damage to tissue.
Ingestion: Slightly toxic. Immediate irritation and possible damage to mucous membranes, circulatory depression, persistent vomiting and diarrhea (Boron compounds), shock.
Signs and Symptoms of Exposure: Not Established
Chronic Effects of Long-term Exposure: Not Established
Carcinogenicity: No component of this product at levels greater than 0.1% is identified as carcinogenic by IARC, ACGIH, or OSHA.

12. ECOLOGICAL INFORMATION

Acute Ecotoxicity

Component	CAS Number	Organism	Ecotoxicity
Sodium borate	1303-96-4	Not Established	Not Established



Ecological Effects

Persistence and Degradability: Not Established
Bioaccumulation Potential: Not expected to bio-accumulate
Mobility in Soil: Not Established
Other Adverse Effects: Not Established

13. DISPOSAL CONSIDERATIONS

Disposal: Surplus and non-recyclable material should be treated as hazardous waste and be disposed of by a licensed disposal company. Material should be disposed in accordance with all local, state, and federal regulations. Regulations vary by region. Do not release into sewers or waterways. Small quantities may be flushed to the sanitary sewer. Use D.O.T. approved containers for waste disposal. Dispose of all waste according to Federal, State, and Local regulations.

Contaminated Packaging: Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT Information

Proper Shipping Name: Non-Regulated Water Treatment Compound
UN Number:
Hazard Class:
Packing Group:
Reportable Quantity (RQ):
Marine Pollutant: Not Established
Note:

15. REGULATORY INFORMATION

US Federal

SARA 302 Components: This product does not contain a Section 302 substance subject to Emergency Planning Notification/Threshold Planning Quantities
SARA 311/312 Hazards: None
SARA 313 Components: This product does not contain a Section 313 listed toxic chemical subject to release reporting requirements.
TSCA Inventory: All chemical components are listed on TSCA Inventory.

European Union

EC Inventory: Not Established



Advanced Chemical Technology, Inc.

R-275
SAFETY DATA SHEET

Version 1.0
Effective Date: 06/01/2015

State Regulations

CA Prop 65:

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

16. OTHER INFORMATION

SDS Version:

1.0

Revision Date:

06/01/2015

Disclaimer:

The information contained in this document was carefully compiled and is believed to be accurate. The information represents the present state of our knowledge and is applicable to the product with the regard to appropriate safety precautions. However, it does not represent any guarantee of the properties of the product. Advanced Chemical Technology, Inc. shall not be held liable for any damages resulting from handling or from contact with the above product. It is the responsibility of the purchaser to determine the suitability of the product for their particular purposes. Nothing contained herein shall be construed to be a recommendation to use, or as a license to operate under, or to infringe any existing patents. For product information call Advanced Chemical Technology, Inc., 1-909-980-4556.