



SAFETY DATA SHEET

Revision Date: 3/5/2014 / Printed Date 12/15/2014

Product Code: 5602

Product Name: B-2NI Boiler Treatment

1. Product Identification

R.L. CLARKE ENTERPRISES
P.O. BOX 228
AKRON, PA 17501
717 371 2300

| | |
|-------------------------|------------------------|
| Product Code: | 5602 |
| Product Name: | B-2NI Boiler Treatment |
| Product Use: | Boiler Treatment |
| Emergency Phone: | CHEMTREC: 800-424-9300 |

2. Hazard Identification

NOTE: MSDS data pertains to the product as delivered in the original shipping container(s).



GHS Labeling:

GHS Classification:

Skin Corrosion: Category 1a

Eye Damage: Category 1

Signal Word: Danger

Hazard Statements: H314-Causes severe skin burns.
H318-Causes serious eye damage.
H290-May be corrosive to metals..

GHS Precautionary Statement(s) – Prevention

P102- Keep out of reach of children

P101- If medical advice is needed, have product container or label at hand.

P103- Read label before use.

P264 - Wash skin and contaminated clothing thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P234 - Keep only in original container.

P280 - Wear gloves, protective clothing, eye and face protection.

P260 - Do not breathe mist, vapors, or spray.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

GHS Precautionary Statement(s) – Response

IF IN EYES - Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a physician if irritation persists.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call poison control/physician immediately.

IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water. Contact a physician immediately if irritation persists. Wash contaminated clothing before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Specific treatment (see First Aid information on product label and/or Section 4 of the SDS)

GHS Precautionary Statement(s) - Storage



SAFETY DATA SHEET

Revision Date: 3/5/2014 / Printed Date 12/15/2014

Product Code: 5602

Product Name: B-2NI Boiler Treatment

Store in a secure manner.
Store in a well-ventilated place.
Keep cool.

GHS Precautionary Statement(s) - Disposal

Dispose of contents and container in accordance with applicable local, regional, national, and/or international regulations.

Potential Health Effects

Inhalation: May cause irritation (possibly severe), chemical burns, and pulmonary edema.
Ingestion: Swallowing can cause severe burns of the mouth, throat, and stomach. Can cause sore throat, vomiting, diarrhea.
Skin contact: Corrosive. Symptoms of redness, pain, and severe burn can occur.
Eye contact: Corrosive. Can cause blurred vision, redness, pain, severe tissue burns and eye damage.
Chronic exposure: No information found.

ECOLOGICAL HAZARDS: Keep out of water supplies and sewers. This material is alkaline and may raise the pH of surface waters. This material has exhibited moderate toxicity to aquatic organisms.

PRECAUTIONARY STATEMENTS: Avoid breathing vapors or mist. Avoid contact with skin, eyes, and clothing. Keep container tightly closed. Wash thoroughly after handling/ Use only with adequate ventilation.

3. Composition / Information on Ingredients

| Chemical Name: | CAS Number | % By Weight |
|------------------|------------|-------------|
| Sodium Hydroxide | 1310-73-2 | 10-20 |
| Sodium Sulfite | 7757-83-4 | 5-10 |

Unless listed immediately above, the product contains no hazardous ingredients as listed on the Massachusetts Hazardous Substance List or under §1910.1200 of Title 29 of the Code of Federal Regulations.

4. First Aid Measures

| | |
|-------------------|--|
| Eyes | Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses if present and easy to do. Washing eyes within several seconds is essential to achieve maximum effectiveness. Get medical attention immediately. |
| Skin | Immediately flush skin with plenty of water for at least 15 minutes while removing any contaminated clothing and shoes. Discard contaminated clothing in a manner which limits further exposure, making sure to wash before reuse. Contact a physician immediately if irritation persists. |
| Ingestion | Do not induce vomiting. If victim is conscious and alert, give 2-4 cups of water. Never give anything by mouth to an unconscious person. Get medical attention immediately. |
| Inhalation | Remove from exposure and move to fresh air immediately and keep comfortable for breathing. If breathing is difficult, give oxygen. Call a doctor or poison control center if symptoms persist. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask. Call a doctor or poison control immediately. |

Notes to Physician: Treat symptomatically and supportively. Consult a doctor and/or the nearest Poison Control Centre for all exposures.

5. Fire Fighting Measures

Conditions of flammability:



SAFETY DATA SHEET

Revision Date: 3/5/2014 / Printed Date 12/15/2014

Product Code: 5602

Product Name: B-2NI Boiler Treatment

Not flammable or combustible.

Suitable extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for firefighters:

Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products:

Hazardous decomposition products formed under fire conditions. - Sodium oxides

6. Accidental Release Measures

Protective Measures: Eliminate all sources of ignition in the vicinity of the spill or released vapor. If this material is released into the work area, evacuate the area immediately. Monitor area with combustible gas indicator. Wear appropriate personal protective equipment when cleaning up spills. Refer to Section 8. Eliminate potential sources of ignition. Handling equipment must be bonded and grounded to prevent sparking.

Spill Management: Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible sorbent materials or pumping. All equipment used when handling the product must be grounded. A vapor suppressing foam may be used to reduce vapors. Use clean non-sparking tools to collect absorbed material. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

Reporting: U.S.A. regulations may require reporting spills of this material that could reach any surface waters. Report spills to local authorities and/or the National Response Center at (800) 424-8802 as appropriate or required.

7. Handling and Storage

General Storage Information: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner, or disposed of properly. DO NOT USE OR STORE near heat, sparks or open flames. USE AND STORE ONLY IN WELL VENTILATED AREA. Keep container closed when not in use.

Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink. Store between the following temperatures: 45°F - 120°F (7°C - 49°C). Keep out of the reach of children.

8. Exposure Controls / Personal Protection

| Chemical Name: | PEL (OSHA) | TWA (ACGIH) | TLV (ACGIH) |
|------------------|---------------------|---------------------|-----------------|
| Sodium Hydroxide | 2 mg / m3 (ceiling) | 2 mg / m3 (ceiling) | Not Established |
| Sodium Sulfite | Not Established | Not Established | |

VENTILATION SYSTEM: A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.



SAFETY DATA SHEET

Revision Date: 3/5/2014 / Printed Date 12/15/2014

Product Code: 5602

Product Name: B-2NI Boiler Treatment

PERSONAL RESPIRATORS (NIOSH Approved): If exposure is anticipated to be greater than applicable exposure limits, wear a NIOSH approved respirator that provides adequate protection from measured concentrations of this material. Use the following elements for air-purifying respirators: Air-Purifying Respirator for Organic Vapors Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection.

SKIN PROTECTION: Wear chemical resistant protective clothing, including apron, boots or safety shoes depending on the concentration and quantity of the hazardous substance handled. The chemical resistance of the protective equipment should be inquired at the equipment supplier.

EYE PROTECTION: Use chemical safety glasses and/or full face shield where splashing is possible. Maintain eye wash fountain and quick drench facilities in work area.

9. Physical and Chemical Properties

| | |
|--------------------------------|----------------|
| Appearance | Brown Liquid |
| pH | 14 |
| Volatile (% V.O.C. by volume): | 0.00 |
| Flashpoint | >200F |
| Freezing Point | 32F |
| Vapor Pressure (mm Hg) | Not Known |
| Lower Explosion Limits | Not Determined |

| | |
|----------------------------|-------------------|
| Odor | Faint |
| Specific Gravity | 1.17 |
| Solubility In Water | Complete |
| Melting Point | Not Known |
| Vapor Density (Air=1): | Not Know |
| Evaporation Rate (BuAc=1): | Slower Than Water |
| Upper Explosion Limits | Not Determined |

10. Stability & Reactivity

STABILITY: Stable under ordinary conditions of use and storage.

HAZARDOUS DECOMPOSITION PRODUCTS: Not known.

HAZARDOUS POLYMERIZATION: Will not occur.

INCOMPATIBILITIES: Avoid mixing with other chemicals including metals, oxidizing materials, and acids.

CONDITIONS TO AVOID: Mixing with water, acid, or incompatible materials may cause splattering and release of large amount of heat (under high concentrations).

11. Toxicological Information

The severity of the tissue damage is a function of its concentration, the length of tissue contact time, and local tissue conditions. After exposure there may be a time delay before irritation and other effects occur. This material is a strong irritant and is corrosive to the skin, eyes, and mucous membranes. This material may cause severe burns and permanent damage to any tissue with which it comes into contact. Inhalation will cause severe irritation, possible burns with pulmonary edema, which may lead to pneumonitis. Skin contact with this material may cause severe irritation and corrosion of tissue. Repeated exposure may cause dermatitis. Eye contact can cause severe irritation, corrosion with possible corneal damage and blindness. Ingestion may cause irritation, corrosion/ulceration, nausea, and vomiting

| Chemical Name: | | Species | Dose |
|------------------|-------------|---------|------------|
| Sodium Hydroxide | LD50 Oral | Rat | 500mg/ kg |
| Sodium Hydroxide | LD50 Dermal | Rabbit | 1350mg/kg |
| Sodium Sulfite | LD50 Oral | Rat | 3650mg/ kg |
| Sodium Sulfite | LC50 | Rat | 5500mg/m3 |

12. Ecological Information



SAFETY DATA SHEET

Revision Date: 3/5/2014 / Printed Date 12/15/2014

Product Code: 5602


Product Name: B-2NI Boiler Treatment

Environmental Fate: Not established
Environmental Toxicity: Not available

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Large amounts should be given to a licensed disposal agency. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local regulations.

14. Transportation Information

| | |
|--|--|
| Transportation Hazard Class | Corrosive |
| Placard Required |  |
| DOT Classification (Domestic, Land) | NA 1760, Compounds, Cleaning, Liquid, (Contains Sodium Hydroxide) 8, PGIII Emergency Response Guide No: 154 |

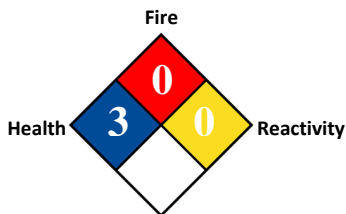
15. Regulatory Information

Not Known
Not Known.

16. Regulatory Information

DISCLAIMER:
See the product label for proper use directions.

HMIS (U.S.A.):



0= None
 1=Slight
 2=Moderate
 3=Serious
 4=Extreme

IMPORTANT: The information presented herein, while not guaranteed, was prepared by technical personnel and is true and accurate to the best of our knowledge. NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, OR WARRANTY OR GUARANTY OF ANY OTHER KIND, EXPRESS OR IMPLIED, IS MADE REGARDING PERFORMANCE, SAFETY, SUITABILITY, STABILITY OR OTHERWISE. This information is not intended to



SAFETY DATA SHEET

Revision Date: 3/5/2014 / Printed Date 12/15/2014

Product Code: 5602

Product Name: B-2NI Boiler Treatment

be all-inclusive as to the manner and conditions of use, handling, storage, disposal and other factors that may involve other or additional legal, environmental, safety or performance considerations, and the manufacturer assumes on liability whatsoever for the use of or reliance upon this information. While our technical personnel will be happy to respond to questions, safe handling and use of the product remains the responsibility of the customer. No suggestions for use are intended as, and nothing herein shall be construed as, a recommendation to infringe any existing patents or to violate any Federal, State, local or foreign laws.

OSHA Standard 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, safety data sheets, training and access to written records. We request that you, and it is your legal duty to, make all information in this Safety Data Sheet available to your employees and customers.