

Material Safety Data Sheet #200 Boiler Treatment

Section 1. Chemical Product and Company Identification

Product Name	#200 Boiler Treatment	
Product Number	NTAL 200BT	
Manufacturer/ Supplier	NuTech Specialties, Inc. 9811 So. 6150 W. West Jordan, UT 84088	
Phone Number	(801) 253-1000 (Mon-Fri/ 8am- 5pm MT)	
D.O.T. Emergency Phone:	1-800-633-8253	
Date of Preparation	September 25, 2012	Revision Number 1.0

Section 2. Hazards Identification

Emergency overview	This product is a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
DANGER!	
Keep out of reach of children. Keep container closed during storage. Ensure that eyewash stations and safety showers are proximal to the work-station location. S24/25- Avoid contact with skin and eyes.	
Potential Acute Health Effects	Eye contact can result in corneal damage or blindness. Corrosive to skin and eyes on contact. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath.
Routes of Entry	Ingestion. Eye contact
Eyes	May cause irritation and burning.
Skin	May cause irritation.
Inhalation	Irritating to the mucous membranes in the nose, throat, and lungs. May cause coughing, chest pain, and difficulty in breathing.
Ingestion	May cause irritation to the mouth and throat.
Medical conditions aggravated by exposure:	Prolonged exposure may result in skin burns and ulcerations. Severe over-exposure can produce lung damage, choking, unconsciousness or death.
Potential Chronic Health	Prolonged exposure may result in skin burns and ulcerations. Severe over-exposure can produce lung damage, choking, unconsciousness or death.
Carcinogenic Effects	Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.
Target Organs	Not available
Environmental Effects	Not available

Section 3. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits	LC ₅₀ /LD ₅₀
Sodium Nitrite	77632-00-0	6		Unknown

Section 4. First Aid Measures

Eye Contact	Eye contact can result in irritation, flush eyes with running water for at least 15 minutes, keeping eyelids open. Call a physician.
Skin Contact	Wash gently and thoroughly the contaminated skin with running water and non abrasive soap for 15 minutes
Inhalation	Get to fresh air. If breathing is difficult, give oxygen. Seek medical attention if symptoms persist.
Ingestion	Have conscious person drink egg whites, gelatin solution, or if these are not available drink large quantities of water. DO NOT induce vomiting. Seek immediate medical attention.
General Advice	In case of Accident or if you feel unwell, seek medical advice immediately (show label or MSDS where possible).
Notes to Physician	Sodium nitrite forms met hemoglobin in the blood stream. Treat accordingly.

Section 5. Fire Fighting Measures

Flammability	No specific information is available in our database regarding the flammability of this product is presence of various materials.
Fire Fighting Media and instructions	All Media
Products of Combustion	Not available
Special Remarks on Fire	Flash point and method used, non-aerosol, none below <212 F. Keep away from reducing agents. Will explode if heated to >1000 C in presence of reducing agents of organic materials or cyanides.
Hazards	
Special Remarks on Explosion Hazards	Not available
Sensitivity to Mechanical Impact	Not available
Sensitivity to Static Discharge	Not available
Protection of Fire Fighters	See special remarks on Fire Hazards

Section 6. Accidental Release Measures

Personal Precautions	Face shield. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Methods for Containment	Absorb with an in inert material and put the spilled material in an appropriate waste disposal.

Environmental Precautions See Methods for Containment

Methods for Clean Up See Methods for Containment

Section 7. Handling and Storage

Precautions Avoid contact with skin and eyes. After handling, always wash hands thoroughly with soap and water.

Incompatibility Strong acids

Storage Corrosive materials should be stored in a separate safety storage cabinet or room. Keep out of reach of children. For Institutional and Commercial Use

Keep out of reach of children.

Keep container closed during storage. Ensure that eyewash stations and safety showers are proximal to the work station location. S24/25- Avoid contact with skin and eyes.

Section 8. Exposure Controls/Personal Protection

Engineering Controls N/A

Personal Protection Good general ventilation should be sufficient to control airborne levels.

Eyes Splash goggles or Face Shield if desired.

Body Additional body garments should be used based upon the task being performed (e.g., sleeveless, apron, gauntlets, disposable suits) to avoid exposed skin surfaces.

Respiratory Wear appropriate respirator when ventilation is inadequate.

Hands Neoprene or rubber gloves if desired.

Protective Clothing (Pictograms)



Exposure Limits

Sodium Hydroxide

TWA: $2 (mg / m^3)$ from OSHA (PEL)

Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical State and Appearance Red Liquid

Molecular Weight N/A

pH 10

Boiling/Condensation Point	212 F
Melting/Freezing Point	32 F
Critical Temperature	1000 C
Instability Temperature	1000 C
Specific Gravity	(H2O = 1) 1.1
Vapor Pressure	(Non-Aerosol)(mm Hg and Temperature):
Vapor Density	(Air = 1)
Volatility	N/A
VOC	N/A
Evaporation Rate	N/A
Dispersion Properties	N/A
Solubility	Complete in water
The Product is:	Alkaline Liquid
Auto-ignition Temperature	N/A
Flash Points	None below 212f
Flammable Limits	Will explode if heated to >1000c in presence of reducing agents or organic materials or cyanide
Fire Hazards in Presence Of Various Substances	Will explode if heated to >1000c in presence of reducing agents or organic materials or cyanide
Explosion Hazards in Presence of Various Substances	Reducing agents. Will explode if heated to >1000c in presence of reducing agents or organic materials or cyanides
Odor	Slight odor
Color	Red liquid

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Incompatibility with Various Substance	Strong acids; Ammonium salts; Amines; Activated carbon; Cyanides; and reducing agents. May react with secondary or tertiary amines to form nitrosamines (certain nitrosamines are cancer-suspect agents)
Hazardous Decomposition Products	Decomposes with heat above 914 to produce oxygen and toxic nitrogen gasses.

Section 11. Toxicological Information

Routes of Entry	Skin Contact. Ingestion. Eye Contact.
Toxicity to Animals	LD-50 (oral-Rat) 132 MG/Kg (sodium nitrite)

Acute Effects on Humans	Acute oral toxicity (LD50): 140 mg/kg {Rat}. (Sodium Hydroxide)
Eyes	May cause irritation and burning.
Skin	May cause irritation.
Inhalation	Irritating to the mucous membranes in the nose, throat, and lungs. May cause coughing, chest pain, and difficulty in breathing.
Ingestion	May cause irritation to the mouth and throat.
Chronic Effects on Humans	Prolonged exposure may result in skin burns and ulcerations. Severe over-exposure can produce lung damage, choking, unconsciousness or death
Special Remarks on Toxicity to Animals	No additional remark
Special Remarks on Chronic Effects on Humans	No additional remark

Section 12. Ecological Information

Ecotoxicity	17.1 ppm / 24hr. / minnow / no effect / fresh water 7.5 ppm / 48hr. / mosquito fish / TLM fresh water
BOD5 and COD	Not available
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	Not available
Special Remarks on the Products of Biodegradation	Not available

Section 13. Disposal Considerations

Waste Information	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Waste Stream	Not available

Section 14. Transport Information

DOT (U.S.A.) (Pictograms)	Not regulated by DOT
TDG Classification	N/A
PIN UN, Proper Shipping Name, PG	Shipping Name: N/A
Maritime Transportation	Not a "marine pollutant"
Special Provisions for Transport	Not available

Section 15. Regulatory Information and Pictograms

Regulatory Lists No products were found.

Other Regulations OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications **USA Regulatory Lists** This product does NOT contain components that are known to the state of California to Cause Cancer or Reproductive Harm at or above California Prop 65 No Observable Effect Level (NOEL)
 SARA 302 Extremely Hazardous Substances - Not listed
 SARA 311 - 1. Immediate (acute) health hazard
 2. Delayed (chronic) health hazard
 SARA 313 Toxic Chemical List – Listed

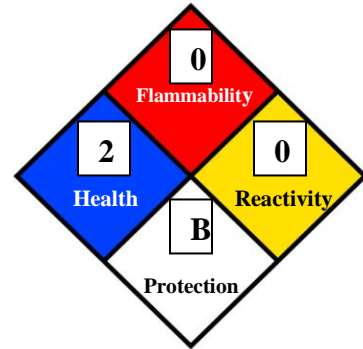
DSD (EEC) R22- Harmful if swallowed.

International Regulations Lists No Products were found.

Hazardous Material Information System (U.S.A.)



National Fire Protection Association (U.S.A.)



WHMIS (Classification) WHMIS CLASS D-1: Material causing immediate and serious toxic effects.

The Hazard Ranking systems presented on this MSDS sheet provide only a quick reference for hazard information. The ENTIRE MSDS must be consulted to determine any specific hazards, First Aid measures, and PPE associated with this product.

Section 16. Other Information

Expiry Date 3 (Three Years) from the date of preparation indicated in Section 1

Validated by Verified by
 Printed

Information Contact

Notice to Reader:

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Validated on NuTech Specialties, Inc.