

## Material Safety Data Sheet BioTech CR

### Section 1. Chemical Product and Company Identification

<b>Product Name</b>	BioTech CR	
<b>Product Number</b>	NTA BTCR	
<b>Manufacturer/ Supplier</b>	NuTech Specialties, Inc. 9811 So. 6150 W. West Jordan, UT 84088	
<b>Phone Number</b>	(801) 253-1000 (Mon-Fri/ 8am- 5pm MT)	
<b>D.O.T. Emergency Phone:</b>	<b>1-800-633-8253</b>	
<b>Date of Preparation</b>	February 21, 2013	<b>Revision Number</b> 1.0

### Section 2. Hazards Identification

<b>Emergency overview</b>	<b>This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.</b>
<b>DANGER!</b>	
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.	
<b>Potential Acute Health Effects</b>	Corrosive to skin and eyes on contact, liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, Characterized by coughing, choking, or shortness of breath. Severe over-exposure can result in death.
<b>Routes of Entry</b>	Eye Contact, Skin contact, Ingestion, INHALATION.
<b>Eyes</b>	Corrosive vapors are irritating and may cause damage to the eyes. Contact may cause severe burns and permanent eye damage.
<b>Skin</b>	Corrosive! Can cause redness, pain, and severe Skin Burns. Concentrated solutions cause deep ulcers and discolor skin.
<b>Inhalation</b>	Corrosive! Inhalation of vapors can cause coughing, choking, inflammation of the nose, Throat and upper respiratory tract, and in severe cases, pulmonary edema, circulatory failure, and death.
<b>Ingestion</b>	Corrosive! Swallowing hydrochloric acid can cause immediate pain and burns of the mouth throat, esophagus and gastrointestinal tract. May cause nausea, vomiting, and diarrhea, and in severe cases, death.
<b>Medical conditions aggravated by exposure:</b>	Prolonged exposure may result in skin burns and ulcerations. Severe over-exposure can produce lung damage, choking, unconsciousness or death.
<b>Potential Chronic Health</b>	Prolonged exposure may result in skin burns and ulcerations. Severe over-exposure can produce lung damage, choking, unconsciousness or death.
<b>Carcinogenic Effects</b>	Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

**Target Organs**

**Environmental Effects** Not available

**Section 3. Composition and Information on Ingredients**

<b>Name</b>	<b>CAS #</b>	<b>% by Weight</b>	<b>Exposure Limits</b>	<b>LC<sub>50</sub>/LD<sub>50</sub></b>
Hydrochloric Acid	7647-01-0	>7%		5/5
Phosphoric Acid	7664-38-2	>12%		1/1

**Section 4. First Aid Measures**

<b>Eye Contact</b>	Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Call a physician immediately.
<b>Skin Contact</b>	Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician, immediately. Wash clothing before reuse.
<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician immediately.
<b>Ingestion</b>	If swallowed, do not induce vomiting. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.
<b>General Advice</b>	In case of Accident or if you feel unwell, seek medical advice immediately (show label or MSDS where possible).
<b>Notes to Physician</b>	Not available

**Section 5. Fire Fighting Measures**

<b>Flammability</b>	No specific information is available in our database regarding the flammability of this product is presence of various materials.
<b>Fire Fighting Media and instructions</b>	Not available
<b>Products of Combustion</b>	Not available
<b>Special Remarks on Fire Hazards</b>	Product is non-Flammable, However, it can react with metals to produce hydrogen, a flammable gas
<b>Special Remarks on Explosion Hazards</b>	Product is non-Flammable, However, it can react with metals to produce hydrogen, a flammable gas
<b>Sensitivity to Mechanical Impact</b>	Not available
<b>Sensitivity to Static Discharge</b>	Not available
<b>Protection of Fire Fighters</b>	See special remarks on Fire Hazards

**Section 6. Accidental Release Measures**

<b>Personal Precautions</b>	Face shield. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
<b>Methods for Containment</b>	Corrosive liquid. Avoid to runoff to sewers and waterways. Wear protective clothing. Absorb with inert material. Contact your local Emergency planning commission for further instructions. Dilute concentration of acid with large volumes of water. Neutralize acid with a solution of sodium hydroxide and water. Take care during the process of neutralization. Use safety equipment
<b>Environmental Precautions</b>	<b>See Methods for Containment</b>
<b>Methods for Clean Up</b>	<b>See Methods for Containment</b>

**Section 7. Handling and Storage**

<b>Precautions</b>	Keep locked up. Keep container dry. <b>DO NOT INGEST.</b> Do not breath the gas, fumes, vapor or spray. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or label. Avoid contact with skin and eyes. After handling, always wash hands thoroughly with soap and water.
<b>Incompatibility</b>	Strong alkalis, most metal, bleach. Alkalis incompatible with chlorinated solvents. Incompatible with alcohols and wide variety of metals
<b>Storage</b>	Corrosive materials should be stored in a separate safety storage cabinet or room. Not for use or storage in or around the home. 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**

<b>Engineering Controls</b>	
<b>Personal Protection</b>	Good general ventilation should be sufficient to control airborne levels.
<b>Eyes</b>	Splash goggles or Face Shield.
<b>Body</b>	Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, disposable suits) to avoid exposed skin surfaces.
<b>Respiratory</b>	Wear appropriate respirator when ventilation is inadequate.
<b>Hands</b>	Impervious gloves
<b>Protective Clothing (Pictograms)</b>	



**Exposure Limits**

<b>Section 9. Physical and Chemical Properties</b>	
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<b>Physical State and Appearance</b>	Clear Liquid
<b>Molecular Weight</b>	N/A
<b>Ph</b>	1
<b>Boiling/Condensation Point</b>	212
<b>Melting/Freezing Point</b>	N/A
<b>Critical Temperature</b>	N/A
<b>Instability Temperature</b>	N/A
<b>Specific Gravity</b>	(H20 = 1): 1.114
<b>Vapor Pressure</b>	(Non-Aerosols)(mm Hg and Temperature): N/A
<b>Vapor Density</b>	(Air = 1)
<b>Volatility</b>	N/A
<b>VOC</b>	N/A
<b>Evaporation Rate</b>	(H20 = 1): N/A
<b>Dispersion Properties</b>	N/A
<b>Solubility</b>	N/A
<b>The Product is:</b>	
<b>Auto-ignition Temperature</b>	N/A
<b>Flash Points</b>	N/A
<b>Flammable Limits</b>	Not applicable
<b>Fire Hazards in Presence Of Various Substances</b>	Product is non-Flammable, however, it can react with metals to produce hydrogen, a flammable gas
<b>Explosion Hazards in Presence of Various Substances</b>	Product is non-Flammable, however, it can react with metals to produce hydrogen, a flammable gas
<b>Odor</b>	Acidic
<b>Color</b>	Clear

<b>Section 10. Stability and Reactivity Data</b>	
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<b>Stability</b>	The product is stable.
<b>Incompatibility with Various Substance</b>	Heat evolution and spattering may result if mixed with strong alkaline products
<b>Hazardous Decomposition Products</b>	Hydrogen chloride gas

## Section 11. Toxicological Information

<b>Routes of Entry</b>	Skin Contact. Ingestion. Eye Contact.
<b>Toxicity to Animals</b>	
<b>Acute Effects on Humans</b>	
<b>Eyes</b>	Corrosive vapors are irritating and may cause damage to the eyes. Contact may cause severe burns and permanent eye damage.
<b>Skin</b>	Corrosive! Can cause redness, pain, and severe Skin Burns. Concentrated solutions cause deep ulcers and discolor skin.
<b>Inhalation</b>	Corrosive! Inhalation of vapors can cause coughing, choking, inflammation of the nose, Throat and upper respiratory tract, and in severe cases, pulmonary edema, circulatory failure, and death.
<b>Ingestion</b>	Corrosive! Swallowing hydrochloric acid can cause immediate pain and burns of the mouth throat, esophagus and gastrointestinal tract. May cause nausea, vomiting, and diarrhea, and in severe cases, death.
<b>Chronic Effects on Humans</b>	Prolonged exposure may result in skin burns and ulcerations. Severe over-exposure can produce lung damage, choking, unconsciousness or death.
<b>Special Remarks on Toxicity to Animals</b>	No additional remark
<b>Special Remarks on Chronic Effects on Humans</b>	No additional remark

## Section 12. Ecological Information

<b>Ecotoxicity</b>	Not available
<b>BOD5 and COD</b>	Not available
<b>Products of Biodegradation</b>	Possibly hazardous short term degradation products are not likely.
<b>Toxicity of the Products of Biodegradation</b>	Not available
<b>Special Remarks on the Products of Biodegradation</b>	Not available

## Section 13. Disposal Considerations

<b>Waste Information</b>	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
<b>Waste Stream</b>	Waste material which has been diluted and neutralized may be flushed to sewer. Empty container may be disposed of in an approved land fill site.

## Section 14. Transport Information

DOT (U.S.A.)  
(Pictograms)



**TDG Classification**

**PIN UN, Proper Shipping Name, PG** Shipping Name: UN 1760, Corrosive Liquid NOS(Phosphoric Acid)8,PGIII

**Maritime Transportation** Not available

**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** **HCS (U.S.A.)** HCS Class: Corrosive Liquid. HCS Class: Toxic.

**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  
SARA 313 Toxic Chemical List – Listed

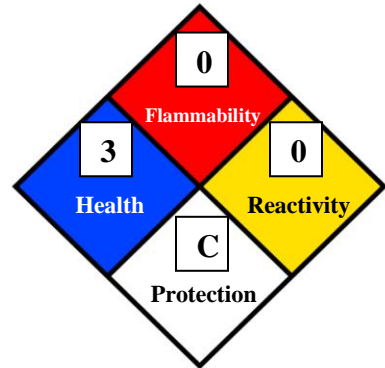
**DSD (EEC)** R22- Harmful if swallowed.  
R35- Causes severe burns.

**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 E: Corrosive Liquid. 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.**