



# Safety Data Sheet

## 22% Nitric Acid(w/w)

### 1. Identification

**Product Name:** 22% Nitric Acid(w/w)**Item #:** MA0519001**Web SDS:** S527**Synonyms:** N/A**Recommended Use:** Industrial Use Only**Restrictions on Use:** Any use other than recommended**Manufacturer:**

BBC Biochemical  
409 Eleanor Lane,  
Mount Vernon, WA 98273  
1-800-635-4477

**In Case of Emergency:**

Chemtrec US 1-800-424-9300  
Chemtrec International 703-527-3887

### 2. Hazards Identification

**OSHA Hazard Classification(s):**

Skin Corrosion - Category 1A

Eye Damage - Category 1

**Signal Word:** Danger**Hazard Statement(s):** May intensify fires, oxidizer. Causes severe skin burns and eye damage.**Pictogram(s):**

**Precautionary Statement(s):** Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands thoroughly after handling. Wear protective gloves, clothing, eye, and face protection. If Swallowed: Rinse mouth. Do not induce vomiting. Immediately seek medical attention. If on Skin: Immediately take off all contaminated clothing. Rinse skin with water for 15 minutes. Immediately seek medical attention. If Inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately seek medical attention. If in Eyes: Rinse cautiously with water for several minutes. Remove contact lenses if easy and present to do. Continue rinsing. Immediately seek medical attention.

Storage: Store locked up.

Disposal: Dispose of contents and container in accordance to local and federal regulations.

**Descriptions of Hazards not otherwise classified:** N/A**Percent of mixture with unknown acute toxicity:** N/A

### 3. Composition and Information on Ingredients

Chemical Name	Common Name	CAS #	Concentration %
Nitric Acid		7697-37-2	20-23%

### 4. First Aid Measures

**Eye Contact:** Causes eye burns. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.

**Skin Contact:** May be harmful if absorbed through skin. If on skin (or hair): Take off immediately all contaminated clothing and wash before reuse. Wash with plenty of water. Get medical advice/attention.

**Inhalation:** Causes respiratory tract irritation. Remove to fresh air; give artificial respiration if breathing has stopped. Get medical attention.

**Ingestion:** Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Get medical attention.

**Symptoms:** Irritation of eyes, nose, throat; headache, dizziness, redness, pain.

**Recommendations for immediate medical care/special treatment:** Get medical advice/attention if exposed.

### 5. Fire- Fighting Measures

**Extinguishing Media:** Dry chemical, carbon dioxide, alcohol foam. Cool unopened containers with water.



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**Fire Hazards (Chemical):** May intensify fires, oxidizer.

**Special Protective Equipment:** Fire fighters should use self-contained breathing apparatus and protective clothing.

**Precautions for Firefighters:** Emits toxic fumes(nitrogen oxides) under fire conditions.

### 6. Accidental Release Measures

**Emergency Procedures:** Evacuate the area of all unnecessary personnel. Wear suitable protective equipment. Eliminate all sources of ignition and provide ventilation.

**Protective Equipment:** See section 8

**Environmental Precautions:** Prevent release to the environment by using barriers.

**Containment and Clean-Up Procedures:** Neutralize spill with sodium bicarbonate or lime. Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

### 7. Handling and Storage

**Handling:** Do not breathe vapors. Do not eat, drink or smoke when using this product. Use adequate ventilation or a respirator.

**Storage:** Store in a well-ventilated place. Keep cool. Keep away from incompatible materials(see Section 10)

### 8. Exposure Controls/Personal Protection

**OSHA Permissible Exposure Limits (PELs):**

Reagent	CAS #	OSHA PEL TWA
Nitric acid	7697-37-2	2ppm(5mg/m3)

**ACGIH Threshold Limit Values (TLVs):**

Reagent	CAS #	ACGIH PEL TLV	ACGIH STEL
Nitric Acid	7697-37-2	2ppm(5mg/m3)	4ppm(10mg/m3)

**Engineering Controls:** Use in a well ventilated area to prevent exposure. Maintain eyewash fountain and quick-drench facilities in work areas.

**Personal Protective Measures:** Wear gloves, lab coat, eye protection and impervious footwear. Contact lenses should not be worn when working with this material.

**Special PPE Requirements:** If ventilation hood not available wear respirator.

### 9. Physical and Chemical Properties Section

**Appearance:** Colorless, Clear Liquid

**Molecular Weight:** N/A

**Molecular Formula:** N/A

**pH:** N/A

**Boiling Point and Boiling Range:** N/A

**Melting Point/Freezing Point:** N/A

**Flash Point:** N/A

**Specific Gravity/Relative Density:** N/A

**Odor:** Sharp, Acrid

**Odor Threshold:** N/A

**Color:** Colorless

**Flammability (solid/gas):** N/A

**Vapor Density:** N/A

**Upper/Lower flammability or explosive limits:** N/A

**Vapor Pressure:** N/A

**Evaporation Rate:** N/A



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**Partition Coefficient: n-octanol/water:** N/A

**Viscosity:** N/A

**Auto-ignition temperature:** N/A

**Solubility:** Water

**Decomposition Temperature:** N/A

### 10. Stability and Reactivity

**Reactivity:** Not Reactive

**Chemical Stability:** Stable

**Conditions of Stability/Instability:** Stable under normal conditions of temperature and pressure

**Stabilizers needed:** None

**Safety issue indicated by appearance change:** N/A

**Other:** N/A

**Hazardous Reactions:** N/A

**Hazardous Polymerization:** Does not occur

**Conditions to avoid:** N/A

**Classes of Incompatible Materials:** Oxidizers, Strong Acids, Strong Bases

**Hazardous Decomposition Products:** Thermal-oxidation degradation can produce oxides of carbon. Toxic gases and vapors (I.e. Carbon monoxide) may be released in a fire.

### 11. Toxicological Information

#### Likely Routes of Exposure

**Eyes:** Itching, redness, burning, watering eyes.

**Skin:** Itching, swelling, redness, burning.

**Inhalation:** Burning, choking, shortness of breath, coughing, wheezing, dizziness.

**Ingestion:** Burning, choking, nausea, vomiting, pain.

**Signs or Symptoms of Exposure:** N/A

**Effects from short term exposure (delayed, immediate, chronic):** Irritation to the eyes, nose, throat; headache, dizziness, nausea.

**Acute Toxicity (Numerical Measures):** LDLO Oral-Human-430mg/kg

**Carcinogenicity (NTP, IARC, OSHA):** N/A

### 12. Ecological Information

**Ecotoxicity:** LC50 – Gambusia affinis – 72 mg/L – 96h

**Persistence and degradability:** N/A

**Bioaccumulation Potential (octanol-water partition coefficient, BCF):** N/A

**Mobility in the soil:** N/A

**Adverse Environmental Effects:** N/A

### 13. Disposal Considerations

**Recommended Disposal Containers:** Check with your local waste authorities\*

**Recommended Disposal Methods:** Do not dispose of in drains, check with your local waste authorities.\*

**Physical/Chemical Properties affecting Disposal:** See section 2 and section 9 applicable information.\*

**Special Precautions for Landfill and Incineration Activities:** Check with your local waste authorities.\*

**Waste Stream:** Consult your local or regional authorities.\*

### 14. Transport Information

**UN Number:** UN2031



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**UN Proper Shipping Name:** Nitric Acid  
**Transport Hazard Class(es):** 8  
**Packing Group Number:** II  
**Environmental Hazards (IMDG code):**  
  **Marine Pollutant:** No  
**Transport in Bulk (IBC Code):** N/A  
**Special Transport Precautions:** N/A

### 15. Regulatory Information

**OSHA:** N/A  
**DOT:** N/A  
**EPA:** N/A  
**CPSC:** N/A



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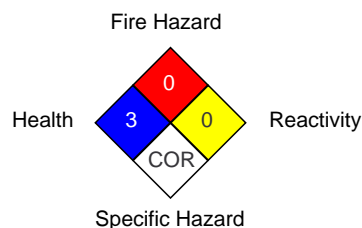
### 16. Other Information

Revision Date: 05/23/2018

#### NFPA

Health	3
Fire Hazard	0
Reactivity	0
Specific Hazard	COR

National Fire Protection Association (USA) NFPA



#### HMIS

Health	3
Flammability	0
Physical Hazard	1
Personal Protection	

Hazardous Material Information System HMIS

Health	3
Flammability	0
Physical Hazard	1
Personal Protection	

#### Notice to Reader:

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