

# G.J. CHEMICAL COMPANY, INC. SAFETY DATA SHEET

## 1. PRODUCT IDENTIFIER

1.1 PRODUCT NAME: **Nitric Acid 50-70% (All Grades)**

PRODUCT NUMBER(S):

212700-Technical Grade

212710-ACS Grade

212725-Trace Metal Grade

212760-Semiconductor Grade

TRADE NAMES/SYNONYMS: Aqua Fortis, Azotic Acid, Nitric Acid 50%, Nitric Acid 65%, Nitric Acid 68-70%

CAS-No: 7697-37-2

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

RECOMMENDED USE: Manufacture of substances, Laboratory Chemicals

USES ADVISED AGAINST: No information available

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Company: G.J. CHEMICAL CO., INC.

Address: 40 VERONICA AVENUE  
SOMERSET, NJ 08873

Telephone: 1-973-589-1450

Fax: 1-973-589-3072

1.4 Emergency Telephone Number

Emergency Phone: 1-800-424-9300 (CHEMTREC)

## 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29CFR 1910 (OSHA HCS)

Oxidizing liquids (Category 3), H272

Corrosive to metals (Category 1), H290

Acute toxicity, Inhalation (Category 3), H331

Skin corrosion (Category 1), H314

Serious eye damage (Category 1), H318

## 2.2 GHS Label elements, including precautionary statements



Pictogram

GHS03

GHS05

Signal word

**DANGER**

Hazard statement(s)

H272 May intensify fire; oxidizer.

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H331 Toxic if inhaled.

Precautionary statement(s)

Prevention:

P210 Keep away from heat.

P220 Keep/Store away from clothing/ combustible materials.

P221 Take any precaution to avoid mixing with combustibles.

P234 Keep only in original container.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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

P304 + P340 + P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.

P363 Wash contaminated clothing before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

P390 Absorb spillage to prevent material damage.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P406 Store in corrosive resistant container with a resistant inner liner

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

### 3. INGREDIENTS

#### 3.1 SUBSTANCE:

Ingredient	CAS No.	% by WT. Range	CLASSIFICATION
Nitric Acid	7697-37-2 EC-No.231-714-2 Index-No.007-004-00-1 Reg.-No. 01-2119487297-23-XXXX	50-70	Oxidizing liquids (Category 3), H272 Corrosive to Metals (Category 1), H290 Acute toxicity, inhalation (Category 3), H331 Skin corrosion (Category 1), H314 Serious eye damage (Category 1), H318
Water	7732-18-5 EC-No.231-791-2	30-50	None

3.2 MIXTURE: Not applicable

### 4. FIRST-AID MEASURES

#### 4.1 DESCRIPTION OF FIRST AID MEASURES:

Emergency and First Aid Procedures:

Inhalation: Nitric Acid

**\*\*FIRST AID-** Immediately get medical aid. Remove to fresh air immediately. If not breathing give artificial respiration. If breathing is difficult give oxygen. Do not use mouth to mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask. Keep warm and quiet.

Eye Contact (Splash): Nitric Acid

**\*\*FIRST AID-** Immediately irrigate eyes with water for 30 minutes. Hold eyelids open for complete irrigation. Remove contact lenses, if worn, after initial flush. Do not allow victim to rub or keep eyes closed. Take to a physician.

Skin Contact(Splash):Nitric Acid

**\*\*FIRST AID-** Immediately wash affected area with soap and water and rinse for 15 minutes. Remove contaminated clothing and shoes. Immediately get a

physician.

Ingestion: Nitric Acid

**\*\*FIRST AID-** DO NOT INDUCE VOMITING. If the victim is conscious and alert give a 2 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Immediately consult a physician or poison control center, treat symptomatically.

#### 4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED INGESTION:

**Eye:** Corrosive. Causes severe eye burns. Direct contact with liquid may cause blindness or permanent eye damage. Vapors are irritating and may cause damage to eyes.

**Skin:** Corrosive. Causes skin burns. May cause deep, penetrating ulcers of the skin. Concentrated nitric acid destroys human skin and turns yellow on contact.

**Inhalation:** Corrosive. Effects may be delayed. Causes chemical burns to the respiratory tract. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Aspiration may lead to pulmonary edema. May cause pulmonary edema, asphyxia, chemical pneumonitis, and upper airway obstruction caused by edema. Depending on the conditions, the vapor or fumes of nitric acid may actually be a mixture of nitric acid and various oxides of nitrogen. The composition may vary with temperature, humidity, and contact with other organic materials. Other symptoms may include coughing, choking, and irritation of the nose, throat and respiratory tract.

**Ingestion:** May cause severe and permanent damage to the digestive tract. Causes severe digestive tract burns with abdominal pain, vomiting and possible death. May cause corrosion and permanent tissue destruction of the esophagus and digestive tract.

**Chronic:** Exposure to high concentrations of nitric acid vapor may cause pneumonitis and pulmonary edema, which may be fatal. Symptoms may or may not be delayed. Continued exposure to the vapor and mist of nitric acid may result in a chronic bronchitis and more severe exposure results in chemical pneumonitis. The vapor and mists of nitric acid may erode the teeth, particularly affecting the canines and incisors.

**Medical Conditions Aggravated by Exposure:** Any individuals with chronic respiratory, skin, eye disease and digestive diseases may be more prone to the corrosive properties of the acid.

#### 4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

Specific details on antidote: No recommendation given.

### 5. FIRE FIGHTING MEASURES

Flash Point:	N.D.	LEL %: NA
Auto-ignition Temp:	NA	UEL %: NA

**5.1 SUITABLE EXTINGUISHING MEDIA:** Foam--> x CO2--> x Dry Chemical--> x Water-fog--> x Other-->

## **5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR**

**MIXTURE:** Not flammable, but reacts with most metals and may evolve flammable hydrogen gas. Vapors may be heavier than air, and can spread along the ground and collect in low or confined areas. Contact with other material may cause fire.

**CONDITIONS OF FLAMMABILITY:** Not flammable or combustible.

**HAZARDOUS COMBUSTION PRODUCTS:** Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including nitrogen oxides, hydrogen, and other toxic organic compounds evolve when this material is heated.

**5.3 ADVICE FOR FIREFIGHTERS:** Shut off source. Wear NIOSH/MSHA approved self-contained breathing apparatus (SCBA) in pressure demand or other positive pressure mode and full protective gear for confined spaces. Strong oxidizer Contact with water can cause violent liberation of heat and splattering of the material. Water run-off can cause environmental damage. Dike and collect water used to fight fire. Use water spray to keep fire exposed containers cool.

## **6. ACCIDENTAL RELEASE MEASURES**

**6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:** Immediately evacuate all nonessential people. Verify that responders are properly trained and wearing appropriate respiratory equipment and fire resistant protective clothing during cleanup operations.

### **6.2 ENVIRONMENTAL PRECAUTIONS:**

Keep out of water sources, drains and sewers. Do not flush into surface water or sanitary sewer system.

### **6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:**

Methods for cleanup and containment:

Approach spill from upwind. Avoid runoff into storm sewers and ditches, which lead to waterways. Large spills may be neutralized with dilute alkaline solutions of soda ash, or lime. A vapor suppressing foam may be used to reduce vapors. Absorb spill using a non combustible absorbent such as, earth, sand or vermiculite. Keep all non-essential people away from exposure. Remove contaminated soil to remove contaminated trace residues.

Methods for disposal:

Place all saturated absorbent, using non-sparking tools, in an approved container for disposal. Minimize breathing vapors and skin contact, ventilate confined areas, open all windows and doors, assure conformity with applicable government regulations.

**REPORTABLE QUANTITY (RQ): 1000 lbs. conc. 1428lbs. solution**

The Superfund Amendments and Reauthorization Act (SARA) Section 304 requires that a release equal to or greater than the reportable quantity for this substance be immediately reported to the local emergency planning committee and the state emergency response commission (40 CFR 355.40). If the release of this substance is reportable under CERCLA Section 103, the national response center must be notified immediately at (800) 424-8882 or (202) 426-2675 in the metropolitan Washington, D. C. area (40 CFR 302.6).

**6.4 REFERENCE TO OTHER SECTIONS:** See Sections 8 and 13.

## **7. HANDLING AND STORAGE**

**7.1 PRECAUTIONS FOR SAFE HANDLING:** Avoid work practices that may release volatile components in the atmosphere. Avoid breathing vapors in top of shipping container. Use with adequate ventilation. Avoid contaminating soil or releasing material into sewage and drainage systems. Do not take internally. Avoid free fall of liquid in excess of a few inches. Use only with adequate ventilation or respiratory protection. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Contents may develop pressure upon prolonged storage. Do not get in eyes, on skin, or on clothing. Discard contaminated shoes. Keep away from strong bases and metals. Use caution when opening. Do not use with metal spatula or other metal items. When diluting, the acid should always be added slowly to water and in small amounts.

**Advice on general occupational hygiene:**

Wash hands before breaks and after work. Keep away from food, drink and animal feeding stuffs. When using do not smoke.

### **7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:**

Do not store in direct sunlight or near combustible materials. Store large quantities only in buildings designed to comply with OSHA 1910.106. Keep containers tight and upright to prevent leakage. Do not store with incompatible materials, separate from oxidizing materials. Keep containers closed when not in use. May corrode metallic surfaces. Store in a metallic or coated fiberboard drum using a strong polyethylene inner package. Hygroscopic. Reacts violently with water. Keep container tightly closed. Keep container in a cool, well ventilated area. Do not store above 23°C (73.4°F). Storage class (TRGS 510): 5.1B: Oxidizing hazardous materials

**CONTAINER WARNINGS**> Empty containers release residue and can be dangerous. Do not attempt to clean. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum re-conditioner.

**7.3 SPECIFIC END USES:** Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## **8. EXPOSURE CONTROL (PERSONAL PROTECTION)**

**8.1 CONTROL PARAMETERS:**

Ingredient	CAS No.	% by WT. Range	Exposure Limits
Nitric Acid	7697-37-2 EC-No.231-714-2 Index-No.007-004-00-1 Reg.-No. 01-2119487297-23-XXXX	50-70	2.0ppm TWA (ACGIH) 2.0ppm TWA (OSHA) 2.0ppm, TWA (NIOSH) 4.0ppm, STEL (ACGIH) 25ppm IDLH
Water	7732-18-5 EC-No.231-791-2	30-50	None

Key: (PEL) = Permissible Exposure Limit OSHA  
(TLV) = Threshold Limit Value OSHA & ACGIH  
(STEL) = Short Term Exposure Limit ACGIH  
(WEEL) = USA. Workplace Environmental Exposure Levels  
(TWA) = Time Weighted Average  
CAS = Chemical Abstracts Registry Number  
IDLH = Immediate Danger to Life and Health  
N.E. =None Established

## 8.2 EXPOSURE CONTROLS

**EXPOSURE GUIDELINES**> Consider the potential hazards of this material (Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended.

**ENGINEERING CONTROLS**> Provide general dilution or local exhaust ventilation in volume and pattern to keep concentrations within permitted exposure limits. All areas should be ventilated in accordance with OSHA Regulation 29 CFR Part 1910. Explosion proof motors should be used in mechanical ventilation.

**RESPIRATORY PROTECTION**> The specific respirator selected must be based on contamination levels found in the work place, must not exceed the working limits of the respirator and be jointly approved by the National Institute for Occupational Safety and Health and the Mine Safety and Health Administration (NIOSH-MSHA):

For vapor concentrations 1 to 10 times TWA or PEL an air purifying NIOSH/MSHA Approved respirator with full face-piece and organic vapor cartridges. For concentrations over 10 times TWA or PEL, in confined areas, and/or where vapor concentrations are unknown use a NIOSH/MSHA approved positive pressure full face-piece supplied air respirator.

**BODY CLOTHING**> Use a complete chemical resistant suit or other impervious clothing. Remove and wash contaminated clothing before reuse.

**SKIN PROTECTION**> Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.

Full contact

Material: Fluorinated rubber

Minimum layer thickness: 0.7 mm

Break through time: 480 min

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.2 mm

Break through time: 30 min

**HYGIENE**: Use good personal hygiene practices, wash hands before eating, drinking, smoking or using toilet facilities.

**EYE/FACE PROTECTION**> Use safety eyewear with splash guards or face shield. Maintain shower and eyewash in the work area.

## 9. **PHYSICAL AND CHEMICAL PROPERTIES**

### 9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

Nitric Acid 7697-37-2

Appearance-----> Clear liquid  
Color-----> Colorless/Brown  
Odor-----> Pungent  
Odor Threshold----- > 0.75 -2.5 ppm  
pH-----> <1  
Molecular weight----- > 63.01amu  
Melting/Freezing Point-----> -42°C (-44°F)  
Boiling Range ( °F)-----> 120.5 °C (248.9 °F)  
Specific Gravity-----> 1.413  
Vapor Pressure-----> 8mmHg@ 20°C  
Vapor Density (air=1)-----> 2.17  
Water Solubility-----> Soluble  
Partition Coefficient N-Octanol/water-> No data available  
Evaporation Rate (Butyl Acetate=1)----> No data available  
Flash Point-----> No data available  
Upper Flammability Limit-----> No data available  
Lower Flammability Limit-----> No data available  
Auto-ignition Temperature-----> No data available  
Decomposition Temperature-----> No data available  
Viscosity-----> No data available  
Explosive Properties-----> No data available  
Oxidizing Properties-----> No data available

9.2 Other information-----> No data available

## 10. **STABILITY AND REACTIVITY INFORMATION**

10.1 **REACTIVITY**: No data available.



**10.2 CHEMICAL STABILITY:**    Unstable ( )                      Stable (X)

**10.3 POSSIBILITY OF HAZARDOUS REACTIONS:** No data available.

**HAZARDOUS POLYMERIZATION**--> May occur ( ) Will not occur (X)

**10.4 CONDITIONS TO AVOID**> Heat, and Open Flame

**10.5 INCOMPATIBLE MATERIALS**--> Metals, strong oxidizing agents, strong reducing agents, strong bases, acetic acid, alcohols, acetone, aniline, hydrogen sulfide, metal powders, carbides, aldehydes, organic solvents, combustible materials, chromic acid, flammable liquids, cyanides, sulfides.

**10.6 HAZARDOUS DECOMPOSITION PRODUCTS**--> Nitrogen oxides.  
Decomposes when in contact with air, light, or organic matter. The yellow color is due to release of nitrogen dioxide on exposure to light.

## **11. TOXICOLOGICAL INFORMATION**

### **11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:**

Routes of Entry: Inhalation--> x Skin--> x Ingestion--> x Eye--> x

#### **ACUTE HEALTH EFFECTS:**

Effects of overexposure:

**Eye**> Corrosive. Causes severe eye burns. Direct contact with liquid may cause blindness or permanent eye damage. Vapors are irritating and may cause damage to eyes.

**Skin**> Corrosive. Causes skin burns. May cause deep, penetrating ulcers of the skin. Concentrated nitric acid destroys human skin and turns yellow on contact.

**Inhalation**> Corrosive. Effects may be delayed. Causes chemical burns to the respiratory tract. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Aspiration may lead to pulmonary edema. May cause pulmonary edema, asphyxia, chemical pneumonitis, and upper airway obstruction caused by edema. Depending on the conditions, the vapor or fumes of nitric acid may actually be a mixture of nitric acid and various oxides of nitrogen. The composition may vary with temperature, humidity, and contact with other organic materials. Other symptoms may include coughing, choking, and irritation of the nose, throat and respiratory tract.

**Ingestion**> May cause severe and permanent damage to the digestive tract. Causes severe digestive tract burns with abdominal pain, vomiting and possible death. May cause corrosion and permanent tissue destruction of the esophagus

and digestive tract.

**Chronic:** Exposure to high concentrations of nitric acid vapor may cause pneumonitis and pulmonary edema, which may be fatal. Symptoms may or may not be delayed. Continued exposure to the vapor and mist of nitric acid may result in a chronic bronchitis and more severe exposure results in chemical pneumonitis. The vapor and mists of nitric acid may erode the teeth, particularly affecting the canines and incisors.

**Medical Conditions Aggravated by Exposure:** Any individuals with chronic respiratory, skin, eye disease and digestive diseases may be more prone to the corrosive properties of the acid.

**ACUTE TOXICITY:**

The effects of overexposure shown in Section II are based on acute toxicity profiles. Typical values are:

Ingredient	Oral LD50 (Rat)	Skin LD50(Rabbit)	Inhalation LC50	
Nitric Acid	430mg/kg		67ppmNO2/4hr 130mg/m3/4hr	

**Skin corrosion/irritation:** Severe skin irritation. Causes skin burns.

**Serious eye damage/irritation:** Severe eye irritation. Causes eye burns. May cause irreversible eye damage

**Respiratory or skin sensitization:** No data available

**MUTAGENIC EFFECTS:** No data available

**CARCINOGEN STATUS:**

**ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**REPRODUCTIVE TOXICITY:** No data available.

**Specific target organ toxicity (STOT-SE) - single exposure (Globally Harmonized System): corrosive to respiratory system**

**Specific target organ toxicity (STOT-RE) - repeated exposure (Globally Harmonized System): no data available**

**Teratogenicity: No information available.**

**Neurotoxicity: No information available.**

**ASPIRATION HAZARD: No data available**

**11.2 ADDITIONAL DATA: Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.**

**Inhalation may provoke the following symptoms: spasm, inflammation and edema of the bronchi, spasm, inflammation and edema of the larynx, pneumonitis, pulmonary edema, Symptoms and signs of poisoning are:, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Pulmonary edema. Effects may be delayed. Large doses may cause: conversion of hemoglobin to methemoglobin, producing cyanosis; marked fall in blood pressure, leading to collapse, coma, and possibly death.**

## **12. ECOLOGICAL INFORMATION**

### **DANGEROUS TO AQUATIC LIFE**

**May be dangerous if it enters water intakes.**

**Notify local health and pollution control officials.**

**Notify operators of nearby water intakes.**

### **12.1 AQUATIC TOXICITY:**

**Toxicity to Fish:**

**LC50 Gambusia affinis (Mosquito fish) - 72 mg/L – 96**

**12.2 PERSISTENCE AND DEGRADABILITY: The methods for determining the biological degradability are not applicable to inorganic substances.**

**12.3 BIOACCUMULATIVE POTENTIAL: No data available**

**12.4 MOBILITY IN SOIL: No data available**

### **12.5 RESULTS OF PBT AND vPvT :**

**PBT assessment results: This substance is not classified as PBT or vPvB.**

**12.6 OTHER ADVERSE EFFECTS: May cause adverse effects in the aquatic environment due to changes in pH.**

**ENVIRONMENTAL FATE:** During transport through the soil, nitric acid will dissolve some of the soil material, in particular, the carbonate based materials. The acid will be neutralized to some degree with adsorption of the proton also occurring on clay materials. However significant amounts of acid are expected to remain for transport down toward the ground water table. Upon reaching the ground water table, the acid will continue to move, now in the direction of the ground water flow.

### **13. DISPOSAL CONSIDERATIONS**

**13.1 WASTE TREATMENT METHODS:** Contact a licensed professional waste disposal service to dispose of this material. Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly it is the responsibility of the user to determine the proper storage, transportation, treatment and or disposal methodologies for spent materials and residues at time of disposition. Dispose in accordance with all applicable disposal regulations. Incinerate or biologically treat under controlled conditions in a permitted facility.

**CONTAMINATED PACKAGING:** Dispose of as unused product.

**RCRA:** The unused product is a RCRA hazardous waste if discarded. The RCRA ID number is: D002.

**DISPOSAL MUST BE IN ACCORDANCE WITH STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE, 48 CFR 262**

### **14. TRANSPORT INFORMATION**

#### **Land Transport (DOT)**

- 14.1 USDOT ID Number-----> UN2031
- 14.2 USDOT Shipping Name-----> Nitric Acid
- 14.3 USDOT Hazard Classification-----> 8, (5.1) (Corrosive Liquid)  
    USDOT Label Codes-----> 8, (5.1)
- 14.4 USDOT Package Code-----> II
- 14.5 Marine Pollutant-----> No
- 14.6 Special precautions for user-----> Yes  
    Emergency Response Guide-----> 157  
    Reportable Quantity-----> 1000lbs. conc., 1428lbs. solution

#### **Sea Transport (IMDG)**

- 14.1 ID Number-----> UN2031
- 14.2 Proper shipping name-----> NITRIC ACID
- 14.3 Hazard Classification-----> 8, (5.1) (Corrosive Liquid)  
    Label Codes-----> 8, (5.1)
- 14.4 Package Code-----> II

14.5 Marine Pollutant-----> No  
14.6 Special precautions for user-----> Yes  
EMS-Number-----> F-A, S-Q

**Air Transport (IATA)**

14.1 ID Number-----> UN2031  
14.2 Proper shipping name-----> Nitric Acid  
14.3 Hazard Classification-----> 8, (5.1) (Corrosive Liquid)  
Label Codes-----> 8, (5.1)  
14.4 Package Code-----> II  
14.5 Environmental hazard-----> None  
14.6 Special precautions for user-----> Yes  
IATA Passenger: Not permitted for transport.

**15. REGULATORY INFORMATION**

**15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION  
SPECIFIC FOR THE SUBSTANCE OR MIXTURE:**

**SARA TITLE III (Superfund Amendment and Reauthorization Act)**

**SECTION 302 AND 304: Extremely Hazardous Substance List (40 CFR 355) - Listed  
Nitric acid CAS-No.7697-37-2: EHSTPQ: 1000lbs.**

**SECTION 313: Toxic Chemicals Listing (40 CFR 372.65) - Listed  
Nitric acid CAS-No.7697-37-2**

**SECTION 311/312: Hazard Categorization (40 CFR 370) - Chronic Health Hazard**

**CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)**

**SECTION 102(A) Hazardous Substances (40 CFR 302.4) - Listed  
Reportable Quantity - 1,000 pounds.**

**SECTION 101(14) Reportable Quantity: 1,000 lbs**

**Massachusetts Right to Know Components  
Nitric acid CAS-No.7697-37-2**

**Pennsylvania Right to Know Components  
Nitric acid CAS-No.7697-37-2  
Water CAS-No. 7732-18-5**

**New Jersey Right to Know Components  
Nitric acid CAS-No.7697-37-2  
Water CAS-No.7732-18-5**

## California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Nitric acid CAS-No.7697-37-2

## TSCA (Toxic Substance Control Act)

Nitric acid CAS-No.7697-37-2 is listed on the TSCA Inventory.

## International Inventories:

<u>Country or Region</u>	<u>Inventory Name</u>	<u>On inventory yes/no</u>
<u>Australia</u>	Australian Inventory of Chemical Substances (AICS)	Yes
<u>Canada</u>	Domestic Substances List (DSL)	Yes
<u>Canada</u>	Non-Domestic Substances List (NDSL)	No
<u>China</u>	Inventory of Existing Chemical Substances in China (IECSC)	Yes
<u>Europe</u>	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
<u>Europe</u>	European List of Notified Chemical Substances (ELINCS)	No
<u>Japan</u>	Inventory of Existing and New Chemical Substances (ENCS)	Yes
<u>Japan</u>	Industrial Safety & Health Law Inventory (ISHL)	Yes
<u>Korea</u>	Existing Chemicals List (ECL)	Yes
<u>Mexico</u>	National Inventory of Chemical Substances (INSQ)	Yes
<u>New Zealand</u>	New Zealand Inventory	Yes
<u>Philippines</u>	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
<u>Switzerland</u>	Inventory of Notified New Substances (CHINV)	Yes
<u>Taiwan</u>	National Existing Chemical Inventory (NECI)	Yes
<u>United States &amp; Puerto Rico</u>	Toxic Substances Control Act Inventory	Yes

**15.2 CHEMICAL SAFETY ASSESSMENT: A chemical safety assessment has been carried out for this substance.**

## 16. OTHER INFORMATION:

### Hazard Rating:

4-Extreme

3-High

2-Moderate

1-Slight

0-Insignificant

NFPA RATINGS (SCALE 0-4): Health=3 Fire=0 Reactivity=2  
HMIS RATINGS (SCALE 0-4): Health=3 Fire=0 Reactivity=2 PPE=K

### Text of hazard statement codes in Section 2 and 3:

H272 May intensify fire; oxidizer.

H290 May be corrosive to metals.

**H314 Causes severe skin burns and eye damage.**

**H318 Causes serious eye damage.**

**H331 Toxic if inhaled.**

**Date of preparation-----> September 12, 2007**

**Revision Number-----> 1.3**

**Revision Content-----> General update all sections**

**Revision Date-----> April 27, 2015**

**Prepared by-----> T.G. Fenstermaker, Jr.**

**Acronyms:**

ACGIH	-	American Conference of Governmental Industrial Hygienists
AIHA	-	American Industrial Hygiene Association
ANSI	-	American Nation Standards Institute
API	-	American Petroleum Institute
CERCLA	-	Comprehensive Emergency Response, Compensation, and Liability Act
DOT	-	U.S. Department of Transportation
EPA	-	U.S. Environmental Protection Agency
HMIS	-	Hazardous Materials Information System
IARC	-	International Agency For Research On Cancer
MSHA	-	Mine Safety and Health Administration
NFPA	-	National Fire Protection Association
NIOSH	-	National Institute of Occupational Safety and Health
NOIC	-	Notice of Intended Change (Proposed change to ACGIH TLV)
NTP	-	National Toxicology Program
OPA	-	Oil Pollution Act of 1990
OSHA	-	U.S. Occupational Safety & Health Administration
PEL	-	Permissible Exposure Limit (OSHA)
RCRA	-	Resource Conservation and Recovery Act
REL	-	Recommended Exposure Limit (NIOSH)
SARA	-	Superfund Amendments and Reauthorization Act of 1986 Title III
SCBA	-	Self-Contained Breathing Apparatus
STEL	-	Short-Term Exposure Limit (generally 15 minutes)
TLV	-	Threshold Limit Value
TSCA	-	Toxic Substances Control Act
TWA	-	Time Weighted Average (8hr.)
WHMIS	-	Canadian Workplace Hazardous Materials Information System

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