SAFETY DATA SHEET

Preparation Date: 3/26/2014  Revision Date: 4/15/2016  Revision Number:  G3

1. IDENTIFICATION

Product identifier

Product code: N1088
Product Name: NITRIC ACID, TECHNICAL

Other means of identification

Synonyms:
- Aqua fortis
- Azotic acid
- Hydrogen nitrate

CAS #: Mixture
RTECS #: QU5775000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use:

Uses advised against
No information available

Supplier:
Spectrum Chemical Mfg. Corp
14422 South San Pedro St.
Gardena, CA  90248
(310) 516-8000

Order Online At: https://www.spectrumchemical.com

Emergency telephone number
Chemtrec 1-800-424-9300

Contact Person:
- Martin LaBenz (West Coast)
- Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

<table>
<thead>
<tr>
<th>Label element</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 1 Sub-category A</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 1</td>
</tr>
<tr>
<td>Oxidizing liquids</td>
<td>Category 3</td>
</tr>
</tbody>
</table>

Order Online At: https://www.spectrumchemical.com
Hazard statements
Causes severe skin burns and eye damage
May intensify fire; oxidizer

Precautionary Statements - Prevention
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep/Store away from clothing/.? /combustible materials
Take any precaution to avoid mixing with combustibles .?

Precautionary Statements - Response
Immediately call a POISON CENTER or doctor/physician
Specific treatment (see .? on this label)
IN CASE OF FIRE: Use water to extinguish. Do not use dry chemicals or foams. CO₂or Halon may provide limited control.
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.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Weight %</th>
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<tbody>
<tr>
<td>Nitric acid</td>
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<td>70</td>
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<tr>
<td>7697-37-2</td>
<td></td>
<td></td>
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<td>7732-18-5</td>
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<td>7732-18-5</td>
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<td></td>
</tr>
</tbody>
</table>

Product code: N1088
Product name: NITRIC ACID, TECHNICAL
4. FIRST AID MEASURES

First aid measures

General Advice: National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. First aider needs to protect himself.

Skin Contact: Wash off immediately with soap and plenty of water. Continue flushing with plenty of water for at least 15 minutes. Remove all contaminated clothes and shoes. Immediate medical attention is required. Call a physician immediately.

Eye Contact: Flush eyes with water for 15 minutes. Immediate medical attention is required. Call a physician immediately.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. WARNING! It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. Call a physician immediately.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. If victim is conscious, give water or milk. Follow with Milk of Magnesia or egg whites beaten with water. Immediate medical attention is required. Call a physician or Poison Control Center immediately.

Most important symptoms and effects, both acute and delayed

Symptoms

Indication of any immediate medical attention and special treatment needed
Notes to Physician: Treat symptomatically

Protection of first-aiders
First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water. CO2 may be of no value in extinguishing fires involving oxidizers and may only provide limited control.


Specific hazards arising from the chemical

Hazardous Combustion Products: No information available.
Specific hazards: Oxidizer. Keep away from combustible materials (wood, paper, oil, clothing, etc.)
The product is not flammable, but it may cause fire when in contact with other material
Contact with combustible or organic materials may cause fire
Will accelerate burning when involved in a fire
Container explosion may occur under fire conditions or when heated
Flammable in presence of cellulose or other combustible materials.
Phosphine, hydrogen sulfide, selenide all ignite when fuming nitric acid is dripped into gas.
Phosphine ignites in concentrated nitric acid.
Nickel tetraphosphide ignites with fuming nitric acid.
Contact with metals may evolve flammable hydrogen gas.
A jet of ammonia will ignite nitric acid vapor.
Cellulose may be converted to the highly flammable nitrate ester on contact with the vapor of nitric acid as well as the liquid itself

Special Protective Actions for Firefighters
Specific Methods: No information available.
Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protective equipment. Avoid contact with skin, eyes and clothing.

Environmental precautions Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not let product enter drains. Do not flush into surface water or sanitary sewer system. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk.

Methods for cleaning up Neutralize with Sodium carbonate or Sodium bicarbonate. Dilute with water. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions: Use only in area provided with appropriate exhaust ventilation. Keep away from incompatible materials.

Safe Handling Advice
Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe vapors or spray mist. Handle in accordance with good industrial hygiene and safety practice.
Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:
Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. May corrode metallic surfaces. Do not store in uncoated metallic containers. Store in a segregated and approved area. Store away from incompatible materials.

Incompatible Materials:

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

#### National occupational exposure limits

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<th>United States</th>
<th>Canada</th>
<th>Australia</th>
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<td>NIOSH</td>
<td>ACGIH</td>
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<td>2 ppm TWA</td>
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<th>Components</th>
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<td>10 mg/m³ STEL</td>
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<tr>
<td>Water 7732-18-5</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

#### Appropriate engineering controls

Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

#### Individual protection measures, such as personal protective equipment

**Personal Protective Equipment**

- **Eye protection:** Face-shield
- **Skin and body protection:** Chemical resistant protective suit. Gloves. Boots.
- **Respiratory protection:** Vapor respirator. Be sure to use an approved/certified respirator or equivalent.
- **Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

Product code: N1088  Product name: NITRIC ACID, TECHNICAL
9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid
Molecular/Formula weight: 63.01
Flash Point Tested according to: Not available
Upper Explosion Limit (%): No information available
Decomposition temperature(°C/°F): No information available
Density (g/cm3): 1.41-1.42 @ 20 deg. C
Evaporation rate: No information available
Odor threshold (ppm): 0.29-0.98
Miscibility: No information available
Appearance: No information available
Taste: No information available
Flammability: No information available
Autoignition Temperature (°C/°F): No information available
pH: No information available
Specific gravity: No information available
Vapor density: No information available
Partition coefficient (n-octanol/water): No information available
Viscosity: No information available
Color: Colorless. Light yellow.
Formula: HNO3
Flashpoint (°C/°F): No information available.
Lower Explosion Limit (%): No information available
Melting point/range(°C/°F): -41 °C/-42 °F
Boiling point/range(°C/°F): 121-122°C/249.8-251.6 °F
Vapor pressure @ 20°C (kPa): No information available
VOC content (g/L): No information available
Viscosity: No information available
Flash Point Tested according to: Not available
Decomposition temperature(°C/°F): No information available
Density (g/cm3): 1.41-1.42 @ 20 deg. C
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Vapor pressure @ 20°C (kPa): No information available
VOC content (g/L): No information available
Viscosity: No information available
Chemical stability
Stability: Stable.

10. STABILITY AND REACTIVITY

Reactivity
Oxidizer. Reacts violently with alcohol, organic material, turpene, charcoal.
Violent reaction with Nitric acid + Acetone and Sulfuric acid. Incompatible with combustible materials, metallic powders, carbides, aldehydes, cyanides, chromic acid, hydrogen sulfide, sulfides, metals, organic solvents, acetic acid, alkalies, alcohols, cesium and rubidium acetylides, nitrobenzene
Flammable in presence of cellulose or other combustible materials.
Phosphine, hydrogen sulfide, selenide all ignite when fuming nitric acid is dripped into gas.
Phosphine ignites in concentrated nitric acid.
Nickel tetraboride ignites with fuming nitric acid.
Contact with metals may evolve flammable hydrogen gas.
A jet of ammonia will ignite nitric acid vapor.
Cellulose may be converted to the highly flammable nitrate ester on contact with the vapor of nitric acid as well as the liquid itself
Reacts explosively with metallic powders, carbides, cyanides, sulfides, alkalies, and turpentine.
Can react explosively with many reducing agents.
Arsine, phosphine, tetraborane all oxidized explosively in presence of nitric acid.
Cesium and rubidium acetylides explode in contact with nitric acid.
Explosive reaction with Nitric Acid + Nitrobenzene + water.
Detonation with Nitric Acid + 4-Methylcyclohexane.
The addition of warm fuming nitric acid to phosphine causes explosion.
Addition of water to nitrination mixture diluted with an equal volume of water can cause a low order explosion.
Cyclopentadiene reacts explosively with fuming nitric acid.
Mixtures of fuming nitric acid and acetonitrile are high explosives

Product code: N1088
Product name: NITRIC ACID, TECHNICAL
Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Incompatible materials.


Hazardous decomposition products: Nitrogen oxides (NOx).

Other Information
Corrosivity: Extremely corrosive in presence of aluminum, of copper, of brass. Non-corrosive in presence of glass, of stainless steel(304), of stainless steel(316)

Special Remarks on Corrosivity: In presence of traces of oxides, it attacks all base metals except aluminum and special chromium steels.
Nitric Acid corrodes almost all metals except gold, and white gold, forming nitrates.
No corrosive effect on bronze.
No corrosivity data for zinc, and steel

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure
Principal Routes of Exposure:
Skin. Inhalation. Ingestion.

Acute Toxicity
The following values are calculated based on chapter 3.1 of the GHS document.
ATEmix (inhalation-gas) 35714mg/l

Component Information

Nitric acid - 7697-37-2

LD50/oral/rat = No information available
LD50/oral/mouse = No information available
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = 67 ppm Inhalation LC50 Rat 4 h
130 mg/m³4 h
7 mg/l 1 h
LC50/inhalation/mouse = No information available
Other LD50 or LC50information = 430 mg/kg Oral LDL Rat

Water - 7732-18-5

LD50/oral/rat = > 90 mL/kg Oral LD50 Rat
LD50/oral/mouse = No information available
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50information = No information available

Product Information

LD50/oral/rat =

Product code: N1088 Product name: NITRIC ACID, TECHNICAL
VALUE- Acute Tox Oral = No information available

LD50/oral/mouse =
Value - Acute Tox Oral = No information available

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat
VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse
VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: Severe skin irritation. Causes skin burns. May cause deep penetrating ulcers of the skin with a characteristic yellow to brownish discoloration. Absorption through the skin may cause methemoglobinemia (the formation of methemoglobin in the blood which causes deficient oxygenation of the blood due to decreased available hemoglobin).

Eye Contact: Severe eye irritation. Causes eye burns. May cause irreversible eye damage.

Inhalation Causes irritation and possible burns of the respiratory tract with burning pain in the nose and throat, coughing, sneezing, wheezing, shortness of breath and pulmonary edema..

Ingestion Causes serious gastrointestinal tract irritation or burns with nausea, vomiting, severe abdominal pain, and possible "coffee grounds" appearance of the vomitus. May cause perforation of the digestive tract.

Aspiration hazard No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity Repeated inhalation may produce changes in pulmonary function and/or chronic bronchitis. It may also cause weight loss, and affect behavior/central nervous system (headache, dizziness, drowsiness, muscle contaction or spasticity, weakness, loss of coordinaton, mental confusion), and urinary system (kidney failure, decreased urinary output after several hours of uncorrected circulatory collapse).
Repeated exposure may cause discoloration and/or erosion of teeth (dental enamel).
Eye irritation and respiratory tract signs and symptoms resembling those of frequent upper respiratory viral infections have been associated with chronic nitric acid exposure.

Sensitization: No information available

Mutagenic Effects: No information available

Product code: N1088  Product name: NITRIC ACID, TECHNICAL
Carcinogenic effects: Not considered carcinogenic

<table>
<thead>
<tr>
<th>Components</th>
<th>IARC</th>
<th>ACGIH - Carcinogens</th>
<th>NTP</th>
<th>OSHA HCS - Carcinogens</th>
<th>Australia - Notifiable Carcinogenic Substances</th>
<th>Australia - Prohibited Carcinogenic Substances</th>
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<tr>
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<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
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</tbody>
</table>

Reproductive toxicity No data is available

Reproductive Effects: No information available
Developmental Effects: May cause adverse developmental effects based on animal data
Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure No information available
STOT - repeated exposure No information available
Target Organs: Skin. Eyes. Respiratory system.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Nitric acid - 7697-37-2
Freshwater Fish Species Data: 72 mg/L LC50 Gambusia affinis 96h
Persistence and degradability: No information available
Bioaccumulative potential: No information available
Mobility: No information available

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:
Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:
Empty containers should be taken for local recycling, recovery or waste disposal

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
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<td>Water</td>
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Product code: N1088  Product name: NITRIC ACID, TECHNICAL
14. TRANSPORT INFORMATION

DOT
UN-No: UN2031
Proper Shipping Name: Nitric acid (Solution)
Hazard Class: 8
Subsidiary Risk: 5.1
Packing Group: II
ERG No: 157
Marine Pollutant: No data available
DOT RQ (lbs): No information available
Special Provisions: No Information available
Symbol(s): R4

TDG (Canada)
UN-No: UN2031
Proper Shipping Name: Nitric acid (Solution)
Hazard Class: 8
Subsidiary Risk: 5.1
Packing Group: II
Marine Pollutant: No Information available

ADR
UN-No: UN2031
Proper Shipping Name: Nitric acid (Solution)
Hazard Class: 8
Packing Group: II
Subsidiary Risk: 5.1

IMO / IMDG
UN-No: UN2031
Proper Shipping Name: Nitric acid (Solution)
Hazard Class: 8
Subsidiary Risk: 5.1
Packing Group: II
Marine Pollutant: No information available
EMS: F-A

RID
UN-No: UN2031
Proper Shipping Name: Nitric acid (Solution)
Hazard Class: 8
Subsidiary Risk: 8 + 5.1
Packing Group: II

ICAO
UN-No: UN2031
Proper Shipping Name: Nitric acid (Solution)
Hazard Class: 8
Subsidiary Risk: 5.1
Packing Group: II

IATA
UN-No: UN2031
Proper Shipping Name: Nitric acid (Solution)
14. TRANSPORT INFORMATION

Hazard Class: 8
Subsidiary Risk: No information available
Packing Group: II
ERG Code: 8L
Special Provisions: No information available

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Components</th>
<th>U.S. TSCA</th>
<th>KOREA KECL (PICCS)</th>
<th>Philippines (PICCS)</th>
<th>Japan ENCS (1)-394</th>
<th>CHINA</th>
<th>Australia (AICS)</th>
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U.S. Regulations

**Nitric acid**
- **Massachusetts RTK:** Present
- **Massachusetts EHS:** extraordinarily hazardous
- **New Jersey RTK Hazardous Substance List:** 1356
- **New Jersey (EHS) List:** 1356 500 lb TPQ
- **New Jersey - Discharge Prevention - List of Hazardous Substances:** Present
- **New Jersey TCPA - EHS:** 15000lbTQ 450lbTQ
- **Pennsylvania RTK:** Environmental hazard
- **Pennsylvania RTK - Environmental Hazard List:** Present
- **Michigan PSM HHC:** = 500 lb TQ 94.5% by weight or greater
- **Minnesota - Hazardous Substance List:** Present
- **New York Release Reporting - List of Hazardous Substances:**
  - 1000 lb RQ
  - 100 lb RQ
- **Louisiana Reportable Quantity List for Pollutants:** 1000lbfinal RQAs listed in 40 CFR 117.3 Table 117.3 and 40 CFR 302.4 Table 302.4
  - 454kgfinal RQAs listed in 40 CFR 117.3 Table 117.3 and 40 CFR 302.4 Table 302.4
  - 1000lbRQAs listed in Louisiana Administrative Code, Title 33, Part 1, Subpart 2, Chapter 39, Subchapter E. Applies to unauthorized emissions based on total mass emitted into or onto all media within any consecutive 24-hour period
  - 100lbRQAs listed in Louisiana Administrative Code, Title 33, Part 1, Subpart 2, Chapter 39, Subchapter E. Applies to unauthorized emissions based on total mass emitted into the atmosphere
- **California Directors List of Hazardous Substances:** Present
- **Water**
  - **New Jersey RTK Hazardous Substance List:** Present (listed under fluorides)
  - **Minnesota - Hazardous Substance List:** Present (listed under fluorides)
  - **California Directors List of Hazardous Substances:** Present (listed under fluorides)

**California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.**

**Chemicals Known to the State of California to Cause Cancer:**
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

**Chemicals Known to the State of California to Cause Reproductive Toxicity:**
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

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<th>Components</th>
<th>Carcinogen</th>
<th>Developmental Toxicity</th>
<th>Male Reproductive Toxicity</th>
<th>Female Reproductive Toxicity</th>
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**CERCLA/SARA**

Product code: N1088  
Product name: NITRIC ACID, TECHNICAL
Components

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<tr>
<th>Components</th>
<th>CERCLA - Hazardous Substances and their Reportable Quantities</th>
<th>Section 302 Extremely Hazardous Substances and TPQs</th>
<th>Section 302 Extremely Hazardous Substances and RQs</th>
<th>Section 313 - Chemical Category</th>
<th>Section 313 - Reporting de minimis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitric acid</td>
<td>1000 lb final RQ 454 kg final RQ</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>1.0 % de minimis concentration</td>
</tr>
<tr>
<td>Water</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

U.S. TSCA

<table>
<thead>
<tr>
<th>Components</th>
<th>TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)</th>
<th>TSCA 8(d) - Health and Safety Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitric acid</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Water</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

Canada

WHMIS hazard class:
C Oxidizing materials
E Corrosive material

Nitric acid
C E including 61.3%, 67.18%, 70%
E 0.63%, 6.3%

Water
Uncontrolled product according to WHMIS classification criteria

Canada Controlled Products Regulation:
This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

<table>
<thead>
<tr>
<th>Components</th>
<th>WHMIS Ingredient Disclosure List -</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitric acid</td>
<td>1 %</td>
</tr>
</tbody>
</table>

Inventory

<table>
<thead>
<tr>
<th>Components</th>
<th>Canada (DSL)</th>
<th>Canada (NDSL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitric acid</td>
<td>Present</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Water</td>
<td>Present</td>
<td>Not Listed</td>
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</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>CEPA Schedule I - Toxic Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitric acid</td>
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<tr>
<td>Water</td>
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</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitric acid</td>
<td>Not listed</td>
</tr>
<tr>
<td>Water</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

EU Classification

R-phrase(s)
R35 - Causes severe burns.
R 8 - Contact with combustible material may cause fire.

Product code: N1088
Product name: NITRIC ACID, TECHNICAL
S -phrase(s)
S23 - Do not breathe gas/fumes/vapor/spray.
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36 - Wear suitable protective clothing.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S 1/2 - Keep locked up and out of the reach of children.

<table>
<thead>
<tr>
<th>Components</th>
<th>Classification</th>
<th>Concentration Limits:</th>
<th>Safety Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitric acid</td>
<td>C; R35</td>
<td>20%&lt;C; R35</td>
<td>S1/2 S23 S26 S36 S45</td>
</tr>
<tr>
<td></td>
<td>O; R8</td>
<td>5%&lt;C&lt;20%; R34</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>70%&lt;C; O; R8</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>No information</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:
C - Corrosive.
O - Oxidising.

16. OTHER INFORMATION

Product code: N1088
Product name: NITRIC ACID, TECHNICAL
Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet