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SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION PRODUCT NAME: Nitric Acid Reagent 903 (1006318), 7603 (1006030) PRODUCT NUMBER: August 01, 2011 DATE: TRADE NAME: Nitric Acid Reagent GENERAL USE: CHEMICAL FAMILY: Nitric Acid PRODUCT DESCRIPTION: Clear, colorless liquid with acrid odor. MANUFACTURER August 1, 2011 DATE PREPARED: SUPERSEDES: Safariland LLC September 8, 2008 ADDRESS (NUMBER, STREET, P.O. BOX) TELEPHONE NUMBER FOR INFORMATION / Customer Service 13386 International Parkway 800-347-1200 (CITY, STATE AND ZIP CODE) COUNTRY **CHEMTEL 24-HOUR EMERGENCY TELEPHONE NUMBER** Jacksonville, FL. 32218 USA 1-800-255-3924 01-813-248-0585 ChemTe North America Toll Free International SECTION 2 - HAZARDS IDENTIFICATION EMERGENCY OVERVIEW DANGER!!! Product is a poison, strong oxidizer, and a corrosive agent. Causes severe burns to skin, eyes, and respiratory tract. Potentially fatal if swallowed or inhaled. Inhalation may cause lung and tracheal damage. Ingestion may cause tooth, esophageal, and gastric damage. Contact with combustible materials may result in fire. USE CAUTION WITH PRODUCT!!! POTENTIAL HEALTH EFFECTS INHALATION: Serious irritant to the mucous membranes and respiratory tract, causing potentially severe or fatal burns due to pulmonary edema and/or pneumonia. Symptoms include coughing, choking, burning, sore throat, wheezing, and shortness of breath. Corrosive substance - may cause severe burns, redness, and pain. Skin may turn yellow and slough off from contact with product. Deep ulcerations that may be slow to heal may develop. Wear personal protective equipment at all times. Both solution and vapors may cause burns, corneal ulcerations or conjunctivitis, leading to permanent eye damage. Severe, painful burns of the mouth, throat, esophagus, and stomach will result. Potentially fatal if swallowed. Damage is often irreversible. CARCINOGENICITY: NTP? NO IARC MONOGRAPHS? NO OSHA REGULATED? NO CALIFORNIA, Prop.65? NO SECTION 3 - HAZARDOUS INGREDIENTS Hazard RISK PHRASES Hazardous Components CAS# **EINECS#** (by Weight) (Full Text Section 15) Symbol Nitric Acid ~68% 7697-37-2 231-714-2 O, C+ R8, R35 Notes: SECTION 4-FIRST AID MEASURES Note - prompt, immediate first aid can greatly lessen the damage caused by this product. INHALATION: Remove victim to fresh air, providing oxygen or artificial respiration if needed. Seek emergency medical attention promptly. Flush with water for at least 15 minutes. Seek emergency medical help. SKIN: Remove contaminated clothing. Rinse with copious amounts of water, Using a drench shower if needed. Get medical attention immediately. INGESTION: nduce vomiting, if patient is conscious. Give large quantities of water to drink and call a physician immediately.

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#### GENERAL HAZARDS:

No combustible. Substance is a powerful oxidizer; reactions with combustibles may result in fire. Reacts with metals to generate highly flammable hydrogen gas.

SECTION 5-FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:

Use water spray if needed to cool containers.

FIRE FIGHTING PROCEDURES:

Emergency responders should wear bunker gear and Self-Contained Breathing Apparatus (SCBA). Proper eye and skin protection should also be used. Water spray can be used to cool equipment and reduce vapors.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

May react explosively with combustible organic products. Reacts with metals to generate flammable hydrogen gas.

HAZARDOUS COMBUSTION PRODUCTS:

Nitrogen Oxides, Carbon Oxides.

#### SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Isolate, then ventilate area. Wear appropriate personal protective equipment, then carefully clean up spill by first containing spill, using dikes if needed. Neutralize with soda ash or lime, then absorb with sand, vermiculite. DO NOT USE SAWDUST TO ABSORB PRODUCT!!! DO NOT RINSE MATERIAL INTO SEWERS OR BODIES OF WATER!

### SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Store in labeled Acid Cabinet. Keep away from combustibles, metals, direct sunlight, and heat. Do not reuse containers. Always add the acid to water when making solutions; otherwise, uncontrolled boiling and splashing may occur.

Nitric Acid	2	5	4	10	2	5	2	5
HAZARDOUS COMPONENTS	TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3	TLV/TWA ppm	TWA mg/m3	STEL ppm	PEL mg/m3
	NIOSH				ACGIH		OSHA	
SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION								

### PERSONAL PROTECTION

RESPIRATORY PROTECTION:

A NIOSH/OSHA or EU vapor respirator is highly recommended for use with this product. Another option is a fume hood.

PROTECTIVE GLOVES:

Gloves are recommended for use of this product. Consult with glove manufacturer for appropriate glove material.

EYE PROTECTION:

Wear safety goggles as a matter of good laboratory practice while using product. A splash shield should be used while pouring.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

An acid-resistant apron or hazard suit is essential for safe handling of Nitric Acid.

WORK / HYGIENIC PRACTICES:

Do not smoke, eat, or drink while using this product. Immediately wash hands after use. Always wear the proper personal protective equipment and observe good laboratory practices.

SECTION 9-PHYSICAL AND CHEMICAL PROPERTIES					
APPEARANCE AND ODOR	VAPOR PRESSURE				
Clear, colorless liquid with acrid odor.	<3.0 mm Hg at 20°C (68°F)				
рН	SPECIFIC GRAVITY (WATER = 1)				
<1.0 (HIGHLY ACIDIC AND CORROSIVE)	1.5				
BOILING POINT / BOILING RANGE	SOLUBILITY IN WATER				
<122°C (252°F)	Soluble				
MELTING POINT	VISCOSITY				
-42°C (-44°F)	NA				
FLAMMABLE LIMITS	VAPOR DENSITY (AIR = 1)				
LEL: NE UEL: NE	2-3				
PERCENT VOLATILE	EVAPORATION RATE (WATER = 1)				
100%	NE				

PRODUCT NAME: Nitric Acid Reagent PRODUCT NUMBER: 903 (1006318), 7603 (1006030) August 01, 2011 DATE: SECTION 10 - STABILITY AND REACTIVITY STABILITY STABLE X CONDITIONS TO AVOID: Excessive heat, light INCOMPATIBILITY (MATERIALS TO AVOID): Combustible Organics, Metals, Strong Bases, Carbides HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Nitrogen Oxides HAZARDOUS POLYMERIZATION: CONDITIONS TO AVOID: Will not occur. None related to polymerization. SECTION 11 - TOXICOLOGICAL INFORMATION CAS# LD50 of Ingredient LC50 of Ingredient **Hazardous Components EINECS#** (Specify Species and Route) (Specify Species) 7697-37-2 lowest published lethal dose: 430 Inhalation rat LC50: 244 ppm (NO2)/ Nitric Acid mg/kg (human) 30 Minutes 231-714-2 SECTION 12 - ECOLOGICAL INFORMATION Concentrated product will corrode sewer systems. Large quantities will cause harm to aquatic life. Do not release product into sewer systems or bodies of water. SECTION 13 - DISPOSAL CONSIDERATIONS WASTE DISPOSAL METHOD: Dispose of product waste as well as containers in accordance with all local, state and federal regulations. SECTION 14 - TRANSPORT INFORMATION PROPER SHIPPING NAME: Nitric Acid DOT HAZARD CLASS / Pack Group: 8 / II IMDG HAZARD CLASS: REFERENCE: **49 CFR** RID/ADR Dangerous Goods Code: 8 UN / NA IDENTIFICATION NUMBER: UN 2031 UN TDG Class / Pack Group: 8 / II LABEL: Corrosive Hazard Identification Number (HIN): 80 HAZARD SYMBOLS: IATA HAZARD CLASS / Pack Group: **CARGO AIRCRAFT - 30L Maximum** 8 / II - FORBIDDEN ON PASSENGER **AIRCRAFT** CORROSIVE

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EU, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

Nitric Acid Reagent PRODUCT NAME: August 01, 2011 903 (1006318), 7603 (1006030) DATE: PRODUCT NUMBER: SECTION 15 - REGULATORY INFORMATION TSCA (USA - Toxic Substance Control Act): Components Listed. SARA TITLE III (USA - Superfund Amendments and Reauthorization Act): NO Chronic Health: YES Acute Health: YES Sudden Release of Pressure: NO Fire: YES Reactive: NO Yes - Nitric Acid 313 REPORTABLE INGREDIENTS: CERCLA (USA - Comprehensive Response Compensation and Liability Act): 1000 pd RQ (454kg) for Nitric Acid California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986: Not listed. State Right to Know: Nitric acid: CA, FL, ILL, MA, NJ, PA, RI IDL (Canadian Ingredient Disclosure List): DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List): Components listed on DSL. Referenced. EINECS (European Inventory of Existing Commercial Chemical Substances): WGK Water Quality Index: SAFETY PHRASES: SYMBOL(S) REQUIRED FOR EU LABEL RISK PHRASES: S1/2: Keep locked up and out of the reach of R8 : Contact with combustible children. material may cause fire. R35 : Causes severe burns. S23 : Do not breathe gas/fumes/vapor/spray (appropriate wording to be specified by the manufacturer). 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 O - Oxidizer where possible). SECTION 16 - OTHER INFORMATION Legend: NA= Not Applicable, NE= Not Established, ND= Not Determined, NR=Not Reported. 0 = INSIGNIFICANT HMIS HAZARD RATINGS HEALTH: 4 0 1 = SLIGHT FLAMMABILITY: PHYSICAL HAZARD: 3 2 = MODERATE PERSONAL PROTECTIVE D 3 = HIGHEQUIPMENT: 4 = EXTREME REVISION SUMMARY: Revised to E.U. protocols 8/1/2011 supersedes 9/8/2008 issue.LB/JTV

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The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.