MATERIAL SAFETY DATA SHEET

ERA A Waters Company

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER: ERA
ADDRESS: 16341 Table Mountain Parkway
Golden, CO, 80403 U.S.A.

BUSINESS PHONE: 303-431-8454
FAX: 303-421-0159 **EMAIL:** info@eraqc.com
CHEMICAL EMERGENCY PHONE: 352-535-5053 (INFOTRAC)

Product Name(s): ERA Cal 1000 mg/L Standards
Aluminum 1000 mg/L, Antimony 1000 mg/L, Arsenic 1000 mg/L, Barium 1000 mg/L, Beryllium 1000 mg/L, Bismuth 1000 mg/L, Boron 1000 mg/L, Cadmium 1000 mg/L, Cerium 1000 mg/L, Total Chromium 1000 mg/L, Cobalt 1000 mg/L, Copper 1000 mg/L, Holmium 1000 mg/L, Indium 1000 mg/L, Iron 1000 mg/L, Lead 1000 mg/L, Lithium 1000 mg/L, Magnesium 1000 mg/L, Manganese 1000 mg/L, Mercury 1000 mg/L, Molydenum 1000 mg/L, Nickel 1000 mg/L, Phosphorus 1000 mg/L, Potassium 1000 mg/L, Scandium 1000 mg/L, Selenium 1000 mg/L, Silicon 1000 mg/L, Silver 1000 mg/L, Sodium 1000 mg/L, Strontium 1000 mg/L, Terbium 1000 mg/L, Thallium 1000 mg/L, Vanadium 1000 mg/L, Yttrium 1000 mg/L, Zinc 1000 mg/L

Catalog / Part Number(s): 011, 012, 013, 014, 015, 016, 017, 018, 020, 021, 022, 023, 024, 025, 026, 027, 028, 029, 030, 031, 032, 033, 034, 035, 036, 039, 040, 063, K01, K02, K03, K04, K06, K07, K08, K09, 186004170, 186004171, 186004172, 186004173, 186004174, 186004175, 186004176, 186004177, 186004179, 186004180, 186004181, 186004182, 186004183, 186004184, 186004185, 186004186, 186004187, 186004188, 186004189, 186004190, 186004191, 186004192, 186004193, 186004194, 186004195, 186004198, 186004199, 186004200, 186004203, 186004204, 186004205, 186004206, 186004208, 186004209, 186004210, 186004211

DATE CREATED: August 19, 2008
DATE REVISED: July 19, 2012
MSDS REFERENCE NUMBER: 027

SECTION 2: HAZARDS IDENTIFICATION

Corrosive. Causes burns. Irritant. Irritating to eyes and skin. The matrix of the standard is a nitric acid/water mixture which is classified as dangerous by Directive 199/45/EC. Use only as directed and in accordance with good laboratory practices.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

				EXPOSURE LIMITS		EU LABEL
CHEMICAL INGREDIENT NAME	CAS NUMBER	EC NUMBER	% BY WT.	OSHA	ACGIH	HAZARD LABEL
Nitric Acid (≤70%)	7697-37-2	231-714-2	≤0.8	2 ppm	2 ppm; 4 ppm (STEL)	

Notes: This standard contains a mixture of metallic compounds/salts at levels <1% in a nitric acid (≤0.8) and water (≥99.2%) mixture packaged in 125-500 mL containers. Exposure Limits are 8-Hour TWA (Time Weighted Average) unless designated C (Ceiling) or STEL (Short Term Exposure Limit). Other components considered Non-Hazardous under OSHA 1910.1200 (HazCom) as they are not present in concentrations exceeding 1% (or 0.1% if considered a known or potential carcinogen). Material Use: Analytical reagent or certified reference material used in laboratories. Uses also include research and development.

SECTION 4: FIRST-AID MEASURES

Inhalation: Remove to fresh air.
Skin Contact: Flush with water.
Eye Contact: Immediately flush with water for a minimum of 15 minutes.
Ingestion: If swallowed, wash out mouth with water provided person is conscious. Seek immediate medical attention.
Note to Physician: Treat symptomatically and supportively.
After following first aid measures, seek medical attention.

SECTION 5: FIRE-FIGHTING MEASURES

Flammable Properties: Not combustible. Use extinguishing media appropriate to surrounding fire conditions.
Extinguishing Media: Water spray, dry chemical, carbon dioxide or appropriate foam.
Unique Aspects Contributing To a Fire: NA
Special Fire Fighting Procedures: Avoid contact with oxidizable substances.
Note: As in any fire, wear self-contained breathing apparatus, and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Ventilate area of leak or spill. Wear appropriate personal protective equipment. Absorb with spill pillow or other neutralizing absorbent and place in closed container for later disposal.

SECTION 7: HANDLING AND STORAGE

Keep container tightly closed. Store in a cool, dry, well-ventilated area. Handle in accordance with good laboratory practices. This product is intended for use only by people trained in the safety and handling of chemicals and laboratory preparations.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Handle in accordance with good laboratory practices. Wash thoroughly after handling.
Respiratory Protection: Not normally needed. If exposure limits are exceeded, use approved respirator.
Eye Protection: Safety glasses with side shields or safety goggles
Skin Protection: Neoprene or other chemical resistant gloves. Disposable nitrile are acceptable for light intermittent exposure.
Engineering Controls: Not normally needed. If exposure limits are exceeded, work in a fume hood.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

DATA FOR MATRIX:

Appearance:	Liquid	Specific Gravity:	NA	Melting Point:	NA
Physical State:	Liquid	Flash Point:	NA	Vapor Pressure:	NA
Odor:	NA	Explosion Limits:	NA	Vapor Density (air=1):	NA
pH:	NA	Boiling Point:	NA	Solubility in Water:	Soluble

SECTION 10: STABILITY AND REACTIVITY

Hazardous Polymerization Will Not Occur __X__ May Occur____ Stability: Stable __X__ Unstable ____
Hazardous Decomposition/Combustion Products: When heated to decomposition, emits toxic nitrogen oxide fumes and hydrogen nitrate.
Conditions and Materials to Avoid: Heat, oxidizing agents, strong bases, carbides, hydrogen sulfide and combustible organics.

SECTION 11: TOXICOLOGICAL INFORMATION

Primary Route(s) of Exposure Under Normal Use: Inhalation, skin contact, eyes.

Target Organ(s): Cardiovascular and respiratory system, teeth & lungs.

Acute Effects: Eye and skin irritation. Damage to digestive and respiratory tract. Headache, nausea, dizziness, blurred vision, respiratory depression.
Nitric Acid: Oral, rat: LD50 =>90 mL/kg; Inhalation, rat: LC50 = 67 ppm (NO2)/4H

Chronic Effects: Dermatitis.

Other Information: Chemical Ingredient(s) not classified as carcinogen(s) by OSHA, IARC, NTP, ACGIH, or California.

SECTION 12: ECOLOGICAL INFORMATION

No information available on this preparation or mixture. By complying with sections 6 & 7 there will be no release into the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

To determine proper disposal, consult applicable federal, state and local environmental control regulations.

SECTION 14: TRANSPORT INFORMATION

Shipment Name/Type: Nitric acid
UN Number: 2031 Shipping/Hazardous Class: 8 Packing Group: II
Shipping regulations are based on combinations of criteria such as quantity, class and packaging according to DOT, IATA and (49) CFR.

SECTION 15: REGULATORY INFORMATION

EU Symbol of Danger: Irritant (Xi) concentration is <5%
EU Risk Phrases: Irritating to eyes and skin [R36/38].

U.S. TSCA: Listed
Canada: This product has been classified according to the hazard criteria of the CPR and this MSDS contains all the information required by the CPR.

SECTION 16: OTHER INFORMATION

United States EPA Regulatory Information:		NFPA Rating:	Health: 2	Flammability: 0	Reactivity: 0
SARA 313:	Yes				
CERCLA RQ:	1000 lbs	HMIS Rating:	Health: 2	Flammability: 0	Physical Hazard: 0

NOTE: NA = Data not available, not established, determined or not pertinent.
DISCLAIMER: The information contained herein has been compiled from data presented in various technical sources believed to be accurate. This information is intended to be used only as a guide and does not purport to be complete. ERA makes no warranties and assumes no liability in connection with the use of this information. It is the user's responsibility to determine the suitability of this information and to assure the adoption of necessary precautions.