MATERIAL SAFETY DATA SHEET Part#F00IS03

SECTION I: GENERAL INFORMATION

PRODUCT NAME: Fluoride ISA, TISAB III MANUFACTURER'S NAME: pHoenix Electrode Company Houston, TX 77081 DISTRIBUTED BY: Radiometer America Inc. ADDRESS: 810 Sharon Drive Westlake, Ohio 44145 PHONE: 216/871-8900 FAX: 216/899-1139

CHEMICAL NAME: TRIS(hydroxymethyl)aminomethane Hydrochloride/Sodium Tartrate in Water CHEMICAL FAMILY: salt solution

DOT SHIPPING INFO: Testing per NACE (TM-01-69) has shown this product to be non-corrosive.

IATA SHIPPING INFO: Testing per NACE (TM-01-69) has shown this product to be non-corrosive.

SECTION II: INGREDIENTS

CAS NO.	8	CHEMICAL NAME(S)	LD50(mg/kg) oral-rat	OSHA/PEL ACGIH TLV
1185-53-1	24.2%	Tris(hydroxymethyl) aminomethane hydrochloride	1200	25 mg/m³
6106-24-7	23.0%	Sodium Tartrate	1300	none
7732-18-5	52.8%	Water	_	none

SECTION III: PHYSICAL DATA

BOILING POINT: 100°C SPECIFIC GRAVITY: 1.07 VAPOR PRESSURE: N/A FREEZING POINT: -6°C VAPOR DENSITY: N/A pH: 5-5.5 WATER SOLUBILITY: Soluble APPEARANCE & ODOR: Colorless liquid

SECTION IV: FIRE & EXPLOSION HAZARD DATA

FLASHPOINT: Not flammable
AUTOIGNITION TEMPERATURE: N/A
EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, alcohol foam or
mist
SPECIAL FIRE FIGHTING PROCEDURES: Use self contained breathing
apparatus.
UNUSUAL FIRE & EXPLOSION HAZARDS: N/A

SECTION V: HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE: Irritation of respiratory tract, upset stomach or nausea, irritation of eyes, nose, and throat. EMERGENCY & FIRST AID: Wash off contact area with water.

EYES & SKIN: Irrigate with plenty of water.

INGESTION/INHALATION: Dilute with large amounts of water. Do not induce vomiting. Consult physician.

SECTION VI: REACTIVITY DATA

STABLE: yes CONDITIONS TO AVOID: Heat or flame INCOMPATIBILITY: Strong oxidizers (HNO₃, Chromic Acid, Sodium Peroxide). Contact with strong caustics can cause spattering. HAZARDOUS DECOMPOSITION PRODUCTS: Toxic gases such as carbon monoxide may be released during a fire. HAZARDOUS POLYMERIZATION: Will not occur.

SECTION VII: SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN: Vacuum up and set aside for waste disposal. **WASTE DISPOSAL METHOD:** Dilute neutralized solution down drain with excess water. Observe all federal, state, and local laws when disposing of this solution.

SECTION VIII: SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: N/A VENTILATION: Yes PROTECTIVE GLOVES: Any EYE PROTECTION: Safety goggles OTHER PROTECTIVE EQUIPMENT:

SECTION IX: SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING & STORAGE: Keep away from oxidizers and caustics. Keep well sealed and store at room temperature.

OTHER PRECAUTIONS: Always wash hands thoroughly with soap and water after working with this material. NFPA Rating (0-4): Health-1, Fire-1, Reactivity-0, Specific-none.

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NAME: Peter Boyle/R & D Director

signature: <u>Peter</u> F. Boyle