

**I. PRODUCT IDENTIFICATION: Optimum Results™ B Reference Electrode Filling Solution Series**

Orion 900062

PRODUCT USE: Reagent

NFPA RATINGS: HEALTH: 2 FLAMMABILITY: 1 REACTIVITY: 0

**II. COMPOSITION/INFORMATION ON INGREDIENTS**

COMPONENT		%	LD <sub>50</sub> mg/kg
Potassium Nitrate (KNO <sub>3</sub> )	7757-79-1	10	3,540 (ORL-RAT)
Potassium Chloride (KCl)	7447-40-7	<1	2,600 (ORL-RAT)
Silver Chloride (AgCl)	7783-90-6	<0.01	None found
Triton X-100 (C <sub>32</sub> H <sub>58</sub> O <sub>11</sub> )	9002-93-1	<0.01	1,800 (ORL-RAT)
Deionized Water (H <sub>2</sub> O)	7732-18-5	<90	190,000 (IPR-MUS)

**III. HAZARDS IDENTIFICATION**

TARGET ORGANS: Kidneys, blood.  
ACUTE TOXICITY: Large amounts taken internally may be fatal or cause dizziness, cramps, convulsions, vomiting, weakness, and collapse.  
CHRONIC TOXICITY: Can cause anemia, nephritis and methemoglobinemia.  
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Kidney or heart problems.

**IV. FIRST AID MEASURES**

EYE AND SKIN CONTACT: Wash with large amounts of water for 15 minutes lifting the eyelids occasionally.  
INHALATION: Not hazardous.  
INGESTION: Induce vomiting. Consult physician.

**V. FIRE FIGHTING MEASURES**

FLASH POINT: NA AUTOIGNITION POINT: NA  
FLAMMABILITY LIMITS: UPPER: NA LOWER: NA  
EXTINGUISHING MEDIA: Dry chemical, water, foam, or CO<sub>2</sub>.

**VI. ACCIDENTAL RELEASE MEASURES**

Dilute with water and clean up and set aside for waste disposal.

**VII. HANDLING AND STORAGE**

**Always wear eye protection and gloves when working with this product.**

Keep sealed and store at room temperature.

**VIII. EXPOSURE CONTROLS/ PERSONAL PROTECTION**

OSHA & ACGIH THRESHOLD LIMIT: None listed.  
PROTECTIVE EQUIPMENT: Safety glasses, lab coat and gloves.

**IX. PHYSICAL AND CHEMICAL PROPERTIES**

STATE: Clear liquid ODOR THRESHOLD: None  
SENSITIVITY TO MECHANICAL IMPACT: None  
SENSITIVITY TO STATIC DISCHARGE: None  
COEFFICIENT OF OIL/WATER DISTRIBUTION: None  
SOLUBILITY IN WATER: Soluble pH: 5.5 – 7.5  
SPECIFIC GRAVITY: 1.06  
BOILING POINT: 100°C MELTING POINT: Not determined  
VAPOR DENSITY: Not determined

**X. STABILITY AND REACTIVITY**

Product is stable. Hazardous polymerization will not occur.  
Incompatibles: Reducing agents, B, BaS, Na Acetate, TI, S, Trichloroethylene, Charcoal.  
Hazardous decomposition product: Oxides of nitrogen upon heating to decomposition.

**XI. TOXICOLOGICAL INFORMATION**

Route of Exposure: Dizziness, nausea, weakness.  
Teratogen Status: None  
Mutagen Status: None  
Reproductive Toxicity: None  
Carcinogen Status: None

**XII. ECOLOGICAL INFORMATION**

None available.

**XIII. DISPOSAL CONSIDERATIONS**

Dispose of in a manner consistent with Federal, State and Local Regulations.

**XIV. TRANSPORT INFORMATION**

Product is not hazardous for transport.

**XV. REGULATORY INFORMATION**

EUROPEAN INFORMATION:

None.

US/ CANADA INFORMATION

SARA/Title III: Potassium nitrate is listed in Table 172, 101 of Title 49CFR.  
Cal. Proposition 65: Ingredients not listed.  
US TSCA Inventory: Ingredients are listed.  
CPR Class: D2, B.  
TDG Class: None.  
MSDS discloses elements required by the CPR.

**XVI. OTHER INFORMATION**

THE ABOVE INFORMATION IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST INFORMATION CURRENTLY AVAILABLE TO US. ALL PRODUCTS ARE OFFERED IN ACCORDANCE WITH THE MANUFACTURER'S CURRENT PRODUCTION SPECIFICATIONS AND ARE INTENDED SOLELY FOR USE IN ANALYTICAL TESTING. THE MANUFACTURER SHALL IN NO EVENT BE LIABLE FOR ANY INJURY, LOSS OR DAMAGE RESULTING FROM THE HANDLING, USE OR MISUSE OF THESE PRODUCTS.

MSDS prepared by Quality Assurance Group.