

I. PRODUCT IDENTIFICATION: pH 1.68 Buffer

Orion 910168 and Orion 9116860

PRODUCT USE: pH Buffer

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

II. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT		%	LD ₅₀ mg/kg
Potassium Tetroxalate Dehydrate (KHC ₂ O ₄ H ₂ C ₂ O ₄ ·2H ₂ O)			
CAS NO.	6100-20-5	<2	None listed
Deionized Water			
CAS NO.	7732-18-5	98	190,000 (IPR-MUS)

III. HAZARDS IDENTIFICATION

Low hazard for normal usage: risk cannot be excluded if the product is handled improperly

Harmful if swallowed. May irritate eyes, mucous membranes and skin.

TARGET ORGANS: Skin, eyes, mucous membranes

ACUTE TOXICITY: Low hazard.

CHRONIC TOXICITY: May irritate skin after prolonged exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Disease of the skin.

IV. FIRST AID MEASURES

EYE AND SKIN CONTACT: Wash off with large amounts of water and soap solution.

INGESTION: Give large amounts of water. Consult physician.

INHALATION: Not hazardous. If heated do not inhale vapors/aerosols.

V. FIRE FIGHTING MEASURES

FLASH POINT: NA AUTOIGNITION POINT: NA

FLAMMABILITY LIMITS: UPPER: NA LOWER: NA

SPECIAL RISKS: Development of hazardous combustion gases or vapors possible in event of fire.

EXTINGUISHING MEDIA: Water, CO₂, dry chemical or foam.

VI. ACCIDENTAL RELEASE MEASURES

Take up with absorbent materials. Place in small containers and dispose according local regulations. Render harmless: neutralize with sodium carbonate. Wash spill site with soap solution.

VII. HANDLING AND STORAGE

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

Avoid contact with eyes, skin or clothing. Do not ingest.

VIII. EXPOSURE CONTROLS/ PERSONAL PROTECTION

OSHA THRESHOLD LIMIT: None found ACGIH THRESHOLD LIMIT: None found

TWA: None found

PROTECTIVE EQUIPMENT: Safety glasses, lab coat and gloves.

IX. PHYSICAL AND CHEMICAL PROPERTIES

STATE: Colorless 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: 1.68; SPECIFIC GRAVITY: 1.0;

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: Incompatible with strong oxidizing agents

Hazardous decomposition product: none known

Condition to avoid: Heating

XI. TOXICOLOGICAL INFORMATION

Quantitative Data on the toxicology of this product are not available.

Route of Exposure: May irritate skin, eyes and mucous membranes. May be harmful if swallowed. May cause nausea, vomiting, and spasm in case of ingestion.

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. Not subject of transport regulations

XV. REGULATORY INFORMATION

EUROPEAN INFORMATION:

None

US/ CANADA INFORMATION

SARA/Title III: Ingredients are not listed.

US TSCA Inventory: Ingredients are listed.

CPR Class: None.

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.