

I. PRODUCT IDENTIFICATION: pH 9.18 Buffer

Orion 910918 and Orion 9191860

PRODUCT USE: pH Buffer

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

II. COMPOSITION/INFORMATION ON INGREDIENTS

% LD₅₀ mg/kg

COMPONENT	Sodium Borate (B ₄ Na ₂ O ₇)		
CAS NO.	1303-96-4	<1.1	2,660 (ORL-RAT)

COMPONENT	Deionized Water (H ₂ O)		
CAS NO.	7732-18-5	>99	190,000 (IPR-MUS)

III. HAZARDS IDENTIFICATION

TARGET ORGANS: Skin and eyes.

ACUTE TOXICITY: Low hazard for acute via all routes of entry because of low concentration of salt.

CHRONIC TOXICITY: Low hazard for chronic via all routes of entry because of low concentration of salt.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Skin irritation.

Ingestion: Large quantity may cause stomach upset and nausea.

IV. FIRST AID MEASURES

EYE AND SKIN CONTACT: Wash off contacted area with water at least 15 minutes.

Call physician if irritation develops.

INHALATION: Remove to fresh air. Give artificial respiration if necessary.

INGESTION: Give large amounts of water or milk; consult physician.

V. FIRE FIGHTING MEASURES

FLASH POINT: NA AUTOIGNITION POINT: NA

FLAMMABILITY LIMITS: UPPER: NA LOWER: NA

EXTINGUISHING MEDIA: Water, CO₂.

VI. ACCIDENTAL RELEASE MEASURES

Clean up and set aside for waste disposal.

VII. HANDLING AND STORAGE

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

Avoid heat and flame: when heated to decomposition it emit toxic fumes of Na₂O

VIII. EXPOSURE CONTROLS/ PERSONAL PROTECTION

OSHA & ACGIH THRESHOLD LIMIT: 5 mg/m³ for Sodium Borate

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: 9.18

SPECIFIC GRAVITY: 1.0

BOILING POINT: 101°C MELTING POINT: Not determined

VAPOR DENSITY: Not determined

X. STABILITY AND REACTIVITY

Product is stable. Hazardous polymerization will not occur.

Incompatibles: Strong oxidizers

Hazardous decomposition product: None. Avoid heating to decomposition.

XI. TOXICOLOGICAL INFORMATION

Route of Exposure: Possible irritation of skin in sensitized person.

Teratogen Status: Mutation data cited for Sodium Borate salt.

Reproductive Toxicity: Reproductive effect cited in "Registry of Toxic Effects of Chemical Substances" for Sodium Borate.

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: Ingredients not listed.

Cal. Proposition 65: Ingredients 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.