

I. PRODUCT AND COMPANY IDENTIFICATION:

CATALOG NUMBER: 00654-12
PRODUCT NAME: pH 12.46 Buffer
PRODUCT USE: Buffer
NFPA RATINGS: HEALTH: 2 FLAMMABILITY: 0 REACTIVITY: 0
MANUFACTURER'S NAME: Thermo Fisher Scientific, Inc
ADDRESS: 22 Alpha Road, Chelmsford MA 01824, USA
PHONE NUMBER FOR INFORMATION: 978-232-6000
CHEMTREC® 24 hr Emergency: US 800-424-9300; International 703-527-3887

II. COMPOSITION/INFORMATION ON INGREDIENTS

	%	LD ₅₀ mg/kg
COMPONENT Potassium Chloride (KCl)		
CAS NO. 7447-40-7	<0.4	2,500 (ORL-GPG)
COMPONENT Sodium Hydroxide (NaOH)		
CAS NO. 1310-73-2	<0.2	>90ml/Kg (ORL-RAT)
COMPONENT Deionized Water (H ₂ O)		
CAS NO. 7732-18-5	>99	190,000 (IPR-MUS)

III. HAZARDS IDENTIFICATION

May be harmful if swallowed. May cause irritation to eyes, skin, and respiratory tract. NaOH is present in such low concentration that this product does not present any immediate threat to health and safety.

TARGET ORGANS: Eyes, skin, respiratory tract, mucous membrane.
ACUTE TOXICITY: Irritation of skin, eyes and respiratory tract.
CHRONIC TOXICITY: Prolonged contact may cause destructive effect on tissues.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Disease of skin, eyes, or impaired respiratory function.

IV. FIRST AID MEASURES

EYE AND SKIN CONTACT: Wash off contacted area with water at least 15 minutes. Consult physician if irritation develops.
INHALATION: Remove to fresh air. Give artificial respiration if necessary.
INGESTION: Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. Have victim drink 240 to 300 mL (8 to 10 oz.) of water to dilute material in stomach. If milk is available, it may be administered AFTER the water has been given. 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 CO₂.

VI. ACCIDENTAL RELEASE MEASURES

Absorb spill with inert material and set aside for waste disposal. Wash spill site after material pick up is complete.

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. Store at room temperature. Keep away from heat and keep container closed. Store away from acids and flammables.

VIII. EXPOSURE CONTROLS/ PERSONAL PROTECTION

OSHA & ACGIH THRESHOLD LIMIT: 2 mg/m³ (NaOH)
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: 12.46
SPECIFIC GRAVITY: ~1.0
BOILING POINT: NA MELTING POINT: Not determined
VAPOR DENSITY: NA

X. STABILITY AND REACTIVITY

Product is stable. Hazardous polymerization will not occur.
Incompatibles: Acids, organic halogen compounds, metals.
Hazardous decomposition product: May emit toxic fumes of carbon monoxides, potassium oxides and sodium oxides when heated to decomposition. Decomposition of NaOH by reaction with certain metals releases flammable and hydrogen gas.

XI. TOXICOLOGICAL INFORMATION

Route of Exposure: Eyes, skin, respiratory tract, mucous membrane.
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:

RISK PHRASES: None
SAFETY PHRASES: S24/25 Avoid contact with skin and eyes. S36/37/39 Wear suitable protective clothing, gloves, and eye/face protection.

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. CAS # 1310-73-2 is listed on Canada's DSL List and Ingredient Disclosure List.

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 Environmental, Health and Safety.