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MSDS Information for:
Cat. # P-7001 *EpiQuik*™ *In Situ* Histone H3 Phosphorylation (Ser10) Assay Kit

A Material Safety Data Sheet (MSDS) for the product as a whole is not required, as it is a kit consisting of individual components.

The following components are defined as hazardous (See MSDS page).

PA8 (Stop Solution)
5% H_2O_2

The following components are defined as non-hazardous and do not require MSDS. The products do not contain any hazardous components above 1% or any carcinogens above 0.1% as defined in 29 CFR 1910. 1200, the OSHA Hazard Communication Standard.

Components

PA1 (10X Wash Buffer)
PA2 (Permeabilizing Buffer)
PA3 (Blocking Buffer)
PA4 (Antibody Buffer)
PA5 (Capture Antibody, 1000 μg/ml)*
PA6 (Detection Antibody, 200 μg/ml)*
PA7 (Developing Solution)
Phospho $H3^{ser10}$ Control (20 μg/ml)
8-Well Control Strips
Microplates
User Guide

Material Safety Data Sheet

Section 1. Identification

Product Name	*EpiQuik*™ *In Situ* Histone H3 Phosphorylation (Ser10) Assay Kit
Product No.	P-7001

Supplier Epigentek Group Inc.
110 Bi County Blvd. Ste. 122
Farmingdale, NY 11735

In Case of Emergency 631-755-0888

Section 2. Composition, Information on Ingredients

Ingredient Name
PA8 (Stop Solution)
Cas# 7647-01-0

Section 3. Hazards Identification

Label precautionary statements
Toxic
Toxic by inhalation
Causes burns
Irritating to respiratory system
Toxic if ingested
Eye contact may cause severe burns

Section 4. First Aid Measures

Inhalation: Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion: Give large quantities of water or milk if available. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Skin Contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Section 5. Fire Fight Measures

Fire: Not considered to be a fire hazard. May react with metals or heat to release flammable hydrogen gas.

Explosion: Not considered to be an explosion hazard.

Fire Extinguishing Media: Water or water spray. Neutralize with soda ash or slaked lime.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face-piece operated in the pressure demand or other positive pressure mode.

Section 6. Accident Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Absorb onto vermiculite and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

Section 7. Handling and Storage

Handling: Wear appropriate NIOSH/MSHHA approved respirator, chemical resistant gloves, safety goggles and other protective clothing. Mechanical Exhaust required.

Storage: Store in a cool, dry place. Store in a tightly closed container

Section 8. Exposure Control and Personal Protection

Engineering Controls: Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.
Eye: Wear safety glasses and chemical goggles if splashing is possible.
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to minimize contact with skin
Respirators: Following the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149.

Section 9. Physical and Chemical Properties

Physical State: Liquid
Appearance: Clear colorless
Solubility: Infinitely soluble.
Density: 1.05 @ 15˚C (59˚F)
pH: 2.02 (0.01 N)
% Volatiles by Volume @ 21°C : 100
Boiling Point: 101 – 103˚C (214 – 217˚F)
Melting Point: No information found.
Vapor Density (Air=1): No information found.
Vapor Pressure (mm Hg): No information found.
Evaporation Rate (BuAc=1): No information found.

Section 10. Stability and Reactivity

Stability: Stable under ordinary conditions of use and storage.
Hazardous Decomposition Products: When heated to decomposition, emits toxic hydrogen Chloride fumes and will react with water or steam to produce heat and toxic and corrosive fumes. Thermal oxidative decomposition produces toxic chlorine fumes and explosive hydrogen gas.
Hazardous Polymerization: Will not occur.
Incompatibilities: A strong mineral acid, concentrated hydrochloric acid is

	highly reactive with strong bases, metals, metal oxides, hydroxides, amines, carbonates and other alkaline materials. Incompatible with materials such as cyanides, sulfides, sulfites, and formaldehyde.
Conditions to Avoid:	Heat, direct sunlight.

Section 11. Toxicological Information

Hydrochloric acid: Inhalation rat LC50: 3124 ppm/1H; Oral rabbit LD50: 900 mg/kg. Investigated as a tumorigen, mutagen, reproductive effector.

--------\Cancer Lists\----------

	---NTP Carcinogen---		
Ingredient	Known	Anticipated	IARC Category
Hydrogen Chloride (7647-01-0)	No	No	3
Water (7732-18-5)	No	No	None

Section 12. Ecological Information

No information available

Section 13. Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations

Section 14. Transport Information

No information available

Section 15. Regulatory Information

Chemical Inventory Status

Ingredient	TSCA	EC	Japan	Australia
Hydrogen Chloride (7647-01-0)	Yes	Yes	Yes	Yes
Water (7732-18-5)	Yes	Yes	Yes	Yes

Section 16. Other Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

Material Safety Data Sheet

Section 1. Identification

Product Name	*EpiQuik™ In Situ* Histone H3 Phosphorylation (Ser10) Assay Kit
Product No.	P-7001
Supplier	Epigentek Group Inc. 110 Bi County Blvd. Ste. 122 Farmingdale, NY 11735
In Case of Emergency	631-755-0888

Section 2. Composition, Information on Ingredients

Ingredient Name
5% H_2O_2
Cas# 7722-84-1

Section 3. Hazards Identification

Label precautionary statements:
Oxidizer.
Contact with combustibles may cause fire.
Decomposes yielding oxygen that supports combustion of organic matters and can cause overpressure if confined.
Corrosive to eyes, nose, throat and lungs.
May cause skin irritation

Section 4. First Aid Measures

Inhalation:	Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately.
Ingestion:	Rinse mouth with water. Dilute by giving 1 or 2 glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. See a medical doctor immediately.
Skin Contact:	Wash with plenty of soap and water. Get medical attention if irritation occurs and persists.
Eye Contact:	Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Section 5. Fire Fight Measures

Fire:	Not considered to be a fire hazard. May react with metals or heat to release flammable hydrogen gas.
Explosion:	Not considered to be an explosion hazard.
Fire Extinguishing Media:	Water or water spray.

Section 6. Accident Release Measures

General Information: Dilute with a large volume of water and hold in a pond or diked area until hydrogen peroxide decomposes. Hydrogen peroxide may be decomposed by adding sodium metabisulfite or sodium sulfite after diluting to about 5%. Dispose according to methods outlined for waste disposal. Combustible materials exposed to hydrogen peroxide should be immediately submerged in or rinsed with large amounts of water to ensure that all hydrogen peroxide is removed. Residual hydrogen peroxide that is allowed to dry (upon evaporation hydrogen peroxide can concentrate) on organic materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in a fire.

Section 7. Handling and Storage

Handling: Wear cup type chemical safety goggles and full-face shield, impervious clothing, such as rubber, PVC, etc., and rubber or neoprene gloves and shoes. Avoid cotton, wool and leather. Avoid excessive heat and contamination. Contamination may cause decomposition and generation of oxygen gas which could result in high pressures and possible container rupture. Hydrogen peroxide should be stored only in vented containers and transferred only in a prescribed manner (see FMC Technical Bulletins). Never return unused hydrogen peroxide to original container, empty drums should be triple rinsed with water before discarding. Utensils used for handling hydrogen peroxide should only be made of glass, stainless steel, aluminum or plastic.

Storage: Store drums in cool areas out of direct sunlight and away from combustibles. For bulk storage refer to FMC Technical Bulletins.

Section 8. Exposure Control and Personal Protection

Engineering Controls: Ventilation should be provided to minimize the release of hydrogen peroxide vapors and mists into the work environment. Spills should be minimized or confined immediately to prevent release into the work area. Remove contaminated clothing immediately and wash before reuse.

Eye: Wear safety glasses and chemical goggles if splashing is possible.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: If concentrations in excess of 10 ppm are expected use approved self-contained breathing apparatus. Do not use oxidizable sorbants such as activated carbon.

Section 9. Physical and Chemical Properties

Odor: Odorless

Appearance: Clear, colorless liquid

pH: (as is) 2.0 to 3.5

Percent volatile: 100%

Vapor pressure: 28 mmHg @ 30°C (20%); 24 mmHg @ 30°C (31%); 23 mmHg @ 30°C (35%)

Vapor density: (Air = 1): Not available

Boiling point: 103°C/218°F (20%); 107°C/225°F (31%); 108°C/226°F (35%)

Freezing point: -15°C/6°F (20%); -26°C/-15°F (31%); -33°C/-27°F (35%)

Solubility in water: (in H2O % by wt) 100%

Evaporation rate:	(Butyl Acetate = 1) Above 1
Density:	Not available
Specific gravity:	1.07 @ 20°C/4°C (20%); 1.11 @ 20°C/4°C (31%); 1.13 @ 20°C/4°C (35%)
Oxidizing properties:	Strong oxidizer

Section 10. Stability and Reactivity

Stability:	Stable (heat and contamination could cause decomposition)
Hazardous Decomposition Products:	Oxygen which supports combustion.
Hazardous Polymerization:	Will not occur.
Incompatibilities:	Reducing agents, wood, paper and other combustibles, iron and other heavy metals, copper alloys and caustic.
Conditions to Avoid:	Excessive heat or contamination could cause product to become unstable.

Section 11. Toxicological Information

Eye effects:	Extremely irritating/corrosive (rabbit) (35% hydrogen peroxide) [FMC Study Number: I83-748]
Skin effects:	Mildly irritating after 4 hours exposure (rabbit) (35% hydrogen peroxide) [FMC Study Number: I83-747]
Dermal LD_{50}:	>2000 mg/kg (rabbit) (35% hydrogen peroxide) [FMC Study Number: I83-746]
Oral LD_{50}:	=1193 mg/kg (rat) (35% hydrogen peroxide) [FMC Study Number: I83-745]
Inhalation LC_{50}:	>0.17 mg/L (rat) (50% hydrogen peroxide) [FMC Study Number: I89-1080]
Target organs:	Eyes, nose, throat and lungs

Acute effects from overexposure: Extremely irritating/corrosive to eyes and gastrointestinal tract. May cause irreversible tissue damage to the eyes including blindness. Inhalation of mist or vapors may be severely irritating to nose, throat and lungs. May cause skin irritation.

Chronic effects from overexposure: There are reports of limited evidence of carcinogenicity of hydrogen peroxide to mice administered high concentrations in their drinking water (IARC Monograph 36, 1985). However, the International Agency For Research on Cancer concluded that hydrogen peroxide could not be classified as to its carcinogenicity to humans (Group III carcinogen).

Section 12. Ecological Information

Ecotoxicologincal information: Channel catfish 96 hour LC50 = 37.4 mg/L
Fathead minnow 96 hour LC50 = 16.4 mg/L
Daphnia magna 24 hour EC50 = 7.7 mg/L
Daphnia pulex 48 hour LC50 = 2.4 mg/L
Freshwater snail 96 hour LC50 = 17.7 mg/L

For more information refer to ECETOC "Joint Assessment of Commodity Chemicals No. 22, Hydrogen Peroxide." ISSN-0773-6339, January 1993

Section 13. Disposal Considerations

An acceptable method of disposal is to dilute with a large amount of water and allow the hydrogen peroxide to decompose followed by discharge into a suitable treatment system in accordance with all regulatory agencies. The appropriate regulatory agencies should be contacted prior to disposal.

Section 14. Transport Information

PROPER SHIPPING NAME: Hydrogen peroxide, aqueous solutions with not less than 20% but not more than 40% hydrogen peroxide
PRIMARY HAZARD CLASS/DIVISION: 5.1 (Oxidizer)
UN/NA NUMBER: UN 2014
PACKING GROUP: II
PLACARDS: 5.1 (Oxidizer)
LABEL: Oxidizer, Corrosive
OTHER SHIPPING INFORMATION:
DOT Marking: Hydrogen Peroxide, aqueous solution with not less than 20%, but not more than 40% Hydrogen Peroxide, UN 2014
Hazardous Substance/RQ: Not applicable
49 STCC Number : 4918776Aluminum tanks, drum/DOT 42D
SPECIAL SHIPPING NOTES: IMDG: Hydrogen Peroxide, aqueous solutions with not less than 20%, but not more than 40% hydrogen peroxide.IATA: Hydrogen Peroxide, aqueous solutions with not less than 20%, but not more than 40% hydrogen peroxide (*).(*) Air regulations permit shipment of Hydrogen Peroxide (20 - 40%) in unvented containers for Air Cargo Only aircraft, as well as for Passenger and Cargo aircraft. HOWEVER, all FMC Hydrogen Peroxide containers are vented and therefore, air shipments of FMC H2O2 is not permitted. IATA air regulations state that venting of packages containing oxidizing substances is not permitted for air transport.
Protect from physical damage. Keep drums in upright position. Drums should not be stacked in transit. Do not store drum on wooden pallets.

Section 15. Regulatory Information

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355): Not listed
SECTION 311 HAZARD CATEGORY (40 CFR 370):
Fire Hazard
Immediate (Acute) Health Hazard
SECTION 312 THRESHOLD PLANNING QUANTITY (40 CFR 370): 10000 lbs. (conc. <52%)
SECTION 313 REPORTABLE INGREDIENTS (40 CFR 372): Not listed

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT)

CERCLA REGULATORY (40 CFR 302.4): Unlisted (Hydrogen Peroxide 20-40%); RQ = 100 lbs.; Ignitability, Corrosivity

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA STATUS (40 CFR 710): Listed

RCRA STATUS: Waste No. D001 Waste No. D002

CANADA

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM): Product Identification No.: 2014
Hazard Classification: Class C (Oxidizer), Class D, Div. 2, Subdiv. B. (Toxic) Class E (Corrosive)Ingredient Disclosure List: Listed

Section 16. Other Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages