



Epigentek Group Inc.
760 Parkside Ave.
Brooklyn, NY 11226
Phone: 718-484-3990
Fax: 718-484-3956
www.epigentek.com

MSDS Information for:
Cat. #OP-0002-1
EpiQuik™ Nuclear Extraction Kit I

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)

100 X Protease inhibitor cocktail (PIC):	100 μ l
100 X DTT solution	100 μ l

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.

NE1 (10 X pre-extraction buffer):	10 ml
NE2 (extraction buffer):	10 ml

Material Safety Data Sheet

Section 1. Identification

Product Name	<i>EpiQuik</i> ™ Nuclear Extraction Kit I
Product No.	OP-0002-1
Supplier	Epigentek Group Inc. 760 Parkside Ave. Brooklyn, NY 11226

In Case of Emergency 718-484-3990

Section 2. Composition, Information on Ingredients

Ingredient Name	CAS No.
Protease cocktail inhibitors ingredient 1	67-68-5

Section 3. Hazards Identification

Hazards May be harmful by inhalation, ingestion or skin absorption. Vapor or mist is irritating to the eyes, mucous membranes and upper respiratory tract. Causes skin irritation. May cause allergic respiratory and skin reactions.

Chronic Effects Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Section 4. First Aid Measures

If ingested, wash out mouth with water. Call a physician. In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. In case of contact with eyes, flush with copious amounts of water for at least 15 minutes, assure adequate flushing by separating the eyelids with fingers.

Section 5. Fire Fight Measures

Extinguishing Media	Water spray, carbon dioxide, dry chemical powder, polymer foam
Autoignition Temperature	Not applicable
Flash Point	Not available
Explosion Limits	Not available

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, 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 faint yellow
Odor	Distinct garlic
pH	Not determined
Vapor pressure	0.42 mmhg
Viscosity	0.002 pas
Vapor density	2.7g/L

Boiling point	189°C
Freeze/melting point	Not applicable
Specific gravity/density	1.1

Section 10. Stability and Reactivity

Chemical Stability	Stable under normal handling procedures.
Incompatibilities	Acid chlorides, phosphorous halides, strong acids, strong oxidizing agents and strong reducing agents
Decomposition Products	Toxic fumes of: carbon dioxide, nitrogen oxides and sulfur oxides
Hazardous Polymerization	Has not been reported.

Section 11. Toxicological Information

RTECS#	PV6210000
LD50/LC50	Oral, rat: LD50 = 14500 mg/kg
Carcinogenicity	Not listed by OSHA, ACGIH, IARC, NTP

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

US FEDERAL	Listed on the TSCA inventory.
Hazard Symbols	Xi

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™ Nuclear Extraction Kit I

Product No. OP-0002-1
Supplier Epigentek Group Inc.
760 Parkside Ave.
Brooklyn, NY 11226

In Case of Emergency 718-484-3990

Section 2. Composition, Information on Ingredients

Ingredient Name	CAS No.
DTT	3483-12-3

Section 3. Hazards Identification

Inhalation: Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath. Can cause nausea, headache and vomiting. Exposure may result in blood in urine, difficulty breathing, irregular heartbeat, anemia, weakness, drunkenness, bluish skin color, lung congestion, kidney damage, paralysis, convulsions unconsciousness and coma. Thiols may cause central nervous system depression

Ingestion: Exposure can cause nausea, headache, vomiting, diarrhea, weakness, drunkenness, restlessness, bluish skin color, paralysis and coma.

Skin Contact: Causes irritation to skin. Symptoms include redness, itching, and pain. May be absorbed through the skin. May cause dermatitis.

Eye Contact: Causes irritation, redness, and pain.

Chronic Exposure: No information found.

Section 4. First Aid Measures

Inhalation Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion Give large amounts of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.

Skin 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 if symptoms occur.

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

Section 5. Fire Fight Measures

Fire Flash point: > 109°C. As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.

Explosion Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Extinguishing Media Water spray, dry chemical, alcohol foam, or carbon dioxide.

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

Section 6. Accident Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust.

Section 7. Handling and Storage

Product must be refrigerated at 2 – 8°C (36 – 46°F). Keep in a tightly closed container. Protect against physical damage. Handle and store under nitrogen. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

Section 8. Exposure Control, Personal Protection

Airborne Exposure Limits	None established.
Ventilation System	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, <i>Industrial Ventilation, A Manual of Recommended Practices</i> , most recent edition, for details.
Personal Respirators	For conditions of use where exposure to the dust or mist is apparent, a half-face dust/mist respirator may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.
Skin Protection	Wear protective gloves and clean body-covering clothing.
Eye Protection	Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

Section 9. Physical and Chemical Properties

Appearance	White crystals.
Odor	Thiol odor.
Solubility	Soluble in water.
Specific Gravity	1.0
pH	4.3 (5% solution)
% Volatiles by Volume	0
Boiling Point	125 – 130°C (257 – 266°F)
Melting Point	42 – 43°C (108 – 109°F)
Vapor Density (Air=1)	5.3
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. Hygroscopic.
Decomposition Products	Burning may produce carbon monoxide, carbon dioxide, sulfur oxides.
Hazardous Polymerization	Will not occur.

Incompatibilities Strong oxidizers.
Conditions to Avoid Heat, flames, ignition sources and incompatibles.

Section 11. Toxicological Information

LD50 Oral rat LD50: 400 mg/kg.
Carcinogenicity No information found.

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

US FEDERAL: Listed on the TSCA inventory.

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.