

Epigentek Group Inc 110 Bi County Blvd. Ste 122 Farmingdale, NY 11735 Phone: 631-755-0888 Fax: 718-484-3956 www.epigentek.com

MSDS information for: Cat. #P-4036 Epigenase™ Universal SIRT Activity/Inhibition 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)

SS (stop solution) TSA (HDAC Inhibitor, 100 µM)*

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.

WB (10X Wash Buffer)
HO1 (HDAC Assay Buffer)
HO2 (HDAC Substrate, 50 µg/ml)*
HO3 (HDAC Assay Standard, 50 µg/ml)*
HO4 (Capture Antibody, 1000 µg/ml*)
HO5 (Detection Antibody, 400 µg/ml)*
DS (developing solution)
NAD (SIRT Co-factor, 50 X)*
TSA (HDAC Inhibitor, 100 μM)*
8-well Assay Strips (With Frame)
Adhesive Covering Film
User Guide

Material Safety Data Sheet

Material Safety Data Sheet

Section 1. Identification

Product Name	Epigenase™ Universal SIRT	Activity/Inhibition Assay Kit
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Product No. P-4036

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

SS (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 Medi	a :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 facepiece operated in the pressure demand or other positive pressure mode. Structural firefighter's protective clothing is ineffective for fires involving hydrochloric acid.

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: Appearance:	Liquid 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: Hazardous Decomposition Products:	Stable under ordinary conditions of use and storage. 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 Car	cinogen		
Ingredient	Known	Anticipate	ed	IARC Category
Hydrogen Chloride (7647-01-0)		No	No	3
Water (7732-18-5)		No	No	o 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

Section 1. Identification

Product Name	Epigenase™ HDAC Activity/Inhibition Direct Assay Kit (Fluorometric)
Product No.	P-4035
Supplier	Epigentek Group Inc 110 Bi County Blvd. Ste 122 Farmingdale, NY 11735 Phone: 631-755-0888 Fax: 718-484-3956 www.epigentek.com
In Case of Emerg	gency 631-755-0888

Section 2. Composition, Information on Ingredients

Ingredient Name

HI (HDAC Inhibitor TSA, 100 μM)* Cas# 58880-19-6

Section 3. Hazards Identification

2.1 Classification of the substance or mixture GHS Classification in accordance with 29 CFR
1910 (OSHA HCS)
Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 4), H332
Acute toxicity, Dermal (Category 4), H312
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Skin sensitisation (Category 1), H317
Specific target organ toxicity - single exposure (Category 3),
Respiratory system, H335

Section 4. First Aid Measures

4.1 Description of first aid measures General advice Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. If inhaled If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. In case of skin contact Wash off with soap and plenty of water. Consult a physician. In case of eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. If swallowed Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Section 5. Fire Fight Measures

5.1 Extinguishing media Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture Carbon oxides, Nitrogen oxides (NOx) 5.3 Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary. 5.4 Further information No data available

Section 6. Accident Release Measures

6.1 Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.6.4 Reference to other sections For disposal see section 13

Section 7. Handling and Storage

7.1 Precautions for safe handling Avoid contact with skin and eyes. Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature -20 °C Storage class (TRGS 510): Non Combustible Solids

7.3 Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Section 8. Exposure Control and Personal Protection

8.1 Control parameters Components with workplace control parameters Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Skin protection Handle with gloves.

Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.

Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection Complete suit protecting against chemicals,

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator.

Section 9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

a) Appearance Form: solid

- b) Odour No data available
- c) Odour Threshold No data available
- d) pH No data available
- e) Melting point/freezing point No data available
- f) Initial boiling point and boiling range No data available
- g) Flash point No data available
- h) Evaporation rate No data available
- i) Flammability (solid, gas) No data available
- j) Upper/lower flammability or explosive limits No data available
- k) Vapour pressure No data available
- 1) Vapour density No data available
- m) Relative density No data available n) Water solubility No data available
- o) Partition coefficient: noctanol/water No data available

p) Auto-ignition temperature No data available

q) Decomposition temperature No data available

r) Viscosity No data available

s) Explosive properties No data available

t) Oxidizing properties No data available

Section 10. Stability and Reactivity

10.1 Reactivity No data available

10.2 Chemical stability Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions No data available

10.4 Conditions to avoid No data available

10.5 Incompatible materials Oxidizing agents

10.6 Hazardous decomposition products Other decomposition products - No data available

Section 11. Toxicological Information

11.1 Information on toxicological effects

Acute toxicity No data available

Inhalation: No data available No data available

Skin corrosion/irritation No data available

Serious eye damage/eye irritation No data available

Respiratory or skin sensitisation

Germ cell mutagenicity Rat Embryo DNA inhibition

Carcinogenicity IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Reproductive toxicity No data available No data available

Specific target organ toxicity - single exposure Inhalation - May cause respiratory irritation. Specific target organ toxicity - repeated exposure No data available Aspiration hazard No data available

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.