



Safety Data Sheet

KIT - HisDetector™ Western Blot Kit, AP Colorimetric

SDS-10238

Rev. Number: 2

Rev. Date: Feb 6, 2019

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description:	Product Code
KPL HisDetector™ Western Blot Kit, AP Colorimetric	5810-0025 (25-00-01)

Kit Components

Kit Components	Part Code
KPL Tris-Buffered Saline Tween Wash Solution	5810-0026 (50-63-16)
KPL BCIP/NBT Phosphatase Substrate (1-Component)	5420-0034 (50-81-08)
KPL HisDetector™ Nickel-AP (NSS)	5820-0004 (25-01-02)
KPL Detector Block Solution 5X	5440-0003 (71-83-01)

Recommended Use:

Reagent

Contact

Manufacturer:

SeraCare Life Sciences
910 Clopper Road
Gaithersburg, MD 20878

Phone #:

(508) 244-6400
US Toll Free: (800) 676-1881

Fax #:

(508) 634-3394

Web:

www.seracare.com

Email:

customerservice@seracare.com

Emergency Telephone Numbers:

AUSTRALIA – POISONS INFORMATION CENTER

Telephone: 13 11 26 - Hours: 24 hours

CANADIAN TRANSPORT EMERGENCY CENTER

Telephone: (1) 613 996 6666 - Hours: 24 hours/day, 7 days/week

UK – THE NATIONAL FOCUS

Telephone: (44) 029 2041 6388 - Hours: 09:00-17:00 GMT

USA – NATIONAL RESPONSE CENTER

Telephone: (1) 800 424 8802 - Hours: 24 hours/day, 7 days/week

CHEMTREC:

CHEMTREC Customer Number: - CCN12505*
For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 CCN12505 or
+1 703-527-3887 (collect calls accepted)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

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HisDetector Nickel-AP

Rev. Number: 02 Rev. Date: Dec 18, 2017

1 Identification

- **Product Identifier**
- **Trade name: HisDetector™ Nickel-AP**
- **Product Number:** 5820-0004 (25-01-02)
- **Relevant identified uses of the substance or mixture and uses advised against:**
- **Product Description** No further relevant information
- **Application of the substance / the mixture:** Industry Specific Application
- **Details of the Supplier of the Safety Data Sheet:**
- **Manufacturer/Supplier:**
SeraCare Life Sciences
37 Birch Street
Milford, MA 01757
Phone #:(508) 244-6400
US Toll Free: (800) 676-1881
Fax #: (508) 634-3394
www.seracare.com
- Email: customerservice@seracare.com
- **Emergency telephone number:**
For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)
Account number: CCN12505

2 Hazard(s) Identification

- **Classification of the substance or mixture:**



GHS08 Health hazard

Carc. 1A H350 May cause cancer.

Repr. 1 H360 May damage fertility or the unborn child.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

- **Label elements:**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms:**



GHS08

- **Signal word:** Danger

- **Hazard-determining components of labeling:**

Nickel(II) sulfate hexahydrate

- **Hazard statements:**

H350 May cause cancer.

H360 May damage fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

- **Precautionary statements:**

P260 Do not breathe dusts or mists.

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P264	Wash thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	If swallowed: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a poison center/doctor.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

• **Unknown acute toxicity:**

This value refers to knowledge of known, established toxicological or ecotoxicological values.

0 % of the mixture consists of component(s) of unknown toxicity.

• **Hazard(s) not otherwise classified (HNOC):** None known

* 3 Composition/Information on Ingredients

• **Non-hazardous components:**

7732-18-5	Water, distilled water, deionized water	>98%
9001-78-9	Phosphatase, alkaline	<1%

• **Chemical characterization: Mixtures**

• **Description:** Mixture of substances listed below with non-hazardous additions.

• **Dangerous Components:**

10101-97-0	Nickel(II) sulfate hexahydrate	<0.4%
	<p>⚠ Resp. Sens. 1, H334; Muta. 2, H341; Carc. 1A, H350; Repr. 1B, H360; STOT RE 1, H372; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Irrit. 2, H315; Skin Sens. 1, H317</p>	

• **Additional information:**

The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200 Trade Secrets.

4 First-Aid Measures

• **Description of first aid measures:**

• **General information:**

Symptoms of poisoning may occur after exposure to dust, fumes or particulates; seek medical attention if feeling unwell.

• **After inhalation:** Supply fresh air; consult doctor in case of complaints.

• **After skin contact:** If skin irritation occurs, consult a doctor.

• **After eye contact:**

Rinse opened eye for several minutes under running water.

If eye irritation occurs, consult a doctor.

• **After swallowing:** Do not induce vomiting.

• **Information for doctor:**

• **Most important symptoms and effects, both acute and delayed:** No further relevant information available.

• **Indication of any immediate medical attention and special treatment needed:**

No further relevant information available.

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5 Fire-Fighting Measures

- **Extinguishing media:**
- **Suitable extinguishing agents:**
CO₂, sand, dry chemical, water mist or alcohol resistant foam.
Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture:** No further relevant information available.
- **Advice for firefighters:**
- **Protective equipment:**
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures:** Not required.
- **Environmental precautions:** Dilute with plenty of water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
Dispose of the collected material according to regulations.
- **Reference to other sections:**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

• **PAC-1:**

10101-97-0	Nickel(II) sulfate hexahydrate	1.3 mg/m ³
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• **PAC-2:**

10101-97-0	Nickel(II) sulfate hexahydrate	8.7 mg/m ³
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• **PAC-3:**

10101-97-0	Nickel(II) sulfate hexahydrate	52 mg/m ³
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7 Handling and Storage

- **Handling**
- **Precautions for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** Keep protective respiratory device available.
- **Conditions for safe storage, including any incompatibilities:**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Keep material dry.
- **Further information about storage conditions:** None.
- **Specific end use(s):** No further relevant information available.

8 Exposure Controls/Personal Protection

- **Additional information about design of technical systems:** No further data; see section 7.

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• **Control parameters:**

• **Components with occupational exposure limits:**

10101-97-0 Nickel(II) sulfate hexahydrate

PEL	Long-term value: 1 mg/m ³ as Ni
REL	Long-term value: 0.015 mg/m ³ as Ni; See Pocket Guide App. A
TLV	Long-term value: 0.1 mg/m ³ as Ni; inhalable fraction

• **Additional information:** The lists that were valid during the creation of this SDS were used as basis.

• **Exposure controls:**

• **Personal protective equipment:**

• **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing and wash before reuse.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

• **Breathing equipment:** Not necessary if room is well-ventilated.

• **Protection of hands:**



Protective gloves

• **Material of gloves:** Chemical resistant

• **Penetration time of glove material:** Not applicable.

• **Eye protection:**



Safety glasses recommended.



Tightly sealed goggles

• **Body protection:**



Protective work clothing

9 Physical and Chemical Properties

• **Information on basic physical and chemical properties**

• **General Information**

• **Appearance:**

Form:

Liquid

Color:

Colorless to light amber

• **Odor:**

Odorless

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- **Odor threshold:** Not determined.
- **pH-value:** Not applicable.
- **Change in condition**
 - Melting point/Melting range:** Not determined.
 - Boiling point/Boiling range:** ≥ 100 °C (≥ 212 °F)
- **Flash point:** None
- **Flammability (solid, gaseous):** Not applicable.
- **Ignition temperature:** Not applicable
- **Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not self-igniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
 - Lower:** Not determined.
 - Upper:** Not determined.
- **Vapor pressure @ 20 °C (68 °F):** ≤ 23 hPa (≤ 17.3 mm Hg)
- **Density:**
 - Relative density:** Not determined.
 - Vapor density:** Not determined.
 - Evaporation rate:** Not determined.
- **Solubility in / Miscibility with:**
 - Water:** Fully miscible.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - Dynamic:** Not determined.
 - Kinematic:** Not determined.
- **Solvent content:**
 - Water:** 99.9 %
 - VOC content:** 0.00 %
 - Solids content:** 0.1 %
- **Other information:** No further relevant information available.

10 Stability and Reactivity

- **Reactivity:** No further relevant information available.
- **Chemical stability:** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** Contact with moisture, acids and bases.
- **Incompatible materials:** Strong acids, strong bases, strong oxidizing agents and strong reducing agents.
- **Hazardous decomposition products:** No dangerous decomposition products known.

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11 Toxicological Information

• **Information on toxicological effects:**

• **Acute toxicity:**

• **LD/LC50 values that are relevant for classification:**

10101-97-0 Nickel(II) sulfate hexahydrate

Oral	LD50	361 mg/kg (Rat)
Inhalative	LC50/4 h	2.48 mg/l (Rat)

• **Primary irritant effect:**

• **On the skin:** No irritating effect.

• **On the eye:** No irritating effect.

• **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

• **Carcinogenic categories:**

• **IARC (International Agency for Research on Cancer):**

Group 1 - Carcinogenic to humans

Group 2A - Probably carcinogenic to humans

Group 2B - Possibly carcinogenic to humans

Group 3 - Not classifiable as to its carcinogenicity to humans

Group 4 - Probably not carcinogenic to humans

10101-97-0	Nickel(II) sulfate hexahydrate	1
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• **NTP (National Toxicology Program):**

None of the ingredients are listed.

10101-97-0	Nickel(II) sulfate hexahydrate	K
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• **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

None of the ingredients are listed.

12 Ecological Information

• **Toxicity:**

• **Aquatic toxicity:** No further relevant information available.

• **Persistence and degradability:** No further relevant information available.

• **Behavior in environmental systems:**

• **Bioaccumulative potential:** No further relevant information available.

• **Mobility in soil:** No further relevant information available.

• **Additional ecological information:**

• **General notes:** Generally not hazardous for water.

• **Results of PBT and vPvB assessment:**

• **PBT:** Not applicable.

• **vPvB:** Not applicable.

• **Other adverse effects:** No further relevant information available.

13 Disposal Considerations

• **Waste treatment methods:**

• **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Observe all federal, state and local environmental regulations when disposing of this material.

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- **Uncleaned packagings**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport Information

- **UN-Number:**
• **DOT, ADR/ADN, ADN, IMDG, IATA** Non-Regulated Material
- **UN proper shipping name:**
- **DOT, ADR/ADN, ADN, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es):**
- **DOT, ADR/ADN, ADN, IMDG, IATA**
- **Class:** Non-Regulated Material
- **Packing group:**
- **DOT, ADR/ADN, IMDG, IATA** Non-Regulated Material
- **Environmental hazards:** Not applicable.
- **Special precautions for user:** Not applicable.
- **Stowage Category** B
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.
- **UN "Model Regulation":** Non-Regulated Material

15 Regulatory Information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
- **SARA (Superfund Amendments and Reauthorization):**

• **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

• **Section 313 (Specific toxic chemical listings):**

10101-97-0 Nickel(II) sulfate hexahydrate

• **TSCA (Toxic Substances Control Act):**

9001-78-9 Phosphatase, alkaline

7732-18-5 Water, distilled water, deionized water

• **TSCA new (21st Century Act) (Substances not listed)**

10101-97-0 Nickel(II) sulfate hexahydrate

• **California Proposition 65:**

• **Chemicals known to cause cancer:**

10101-97-0 Nickel(II) sulfate hexahydrate

• **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

• **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

• **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

• **New Jersey Right-to-Know List:**

10101-97-0 Nickel(II) sulfate hexahydrate

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<ul style="list-style-type: none"> • New Jersey Special Hazardous Substance List: 		
10101-97-0	Nickel(II) sulfate hexahydrate	CA
<ul style="list-style-type: none"> • Pennsylvania Right-to-Know List: 		
None of the ingredients are listed.		
<ul style="list-style-type: none"> • Pennsylvania Special Hazardous Substance List: 		
None of the ingredients are listed.		
<ul style="list-style-type: none"> • Carcinogenic categories: 		
<ul style="list-style-type: none"> • EPA (Environmental Protection Agency): 		
None of the ingredients are listed.		
<ul style="list-style-type: none"> • TLV (Threshold Limit Value established by ACGIH): 		
10101-97-0	Nickel(II) sulfate hexahydrate	A4
<ul style="list-style-type: none"> • NIOSH-Ca (National Institute for Occupational Safety and Health): 		
10101-97-0	Nickel(II) sulfate hexahydrate	

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms:**



GHS08

- **Signal word:** Danger

- **Hazard-determining components of labeling:**

Nickel(II) sulfate hexahydrate

- **Hazard statements:**

H350 May cause cancer.

H360 May damage fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

- **Precautionary statements:**

P260 Do not breathe dusts or mists.

P264 Wash thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a poison center/doctor.

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **National regulations:**

None of the ingredients are listed.

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- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

- **Date of preparation / last revision:** 12/18/2017 / 11

- **Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
 ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 ACGIH: American Conference of Governmental Industrial Hygienists
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 VOC: Volatile Organic Compounds (USA, EU)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 NIOSH: National Institute for Occupational Safety and Health
 OSHA: Occupational Safety & Health Administration
 TLV: Threshold Limit Value
 PEL: Permissible Exposure Limit
 REL: Recommended Exposure Limit
 Acute Tox. 4: Acute toxicity – Category 4
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Resp. Sens. 1: Respiratory sensitisation – Category 1
 Skin Sens. 1: Skin sensitisation – Category 1
 Muta. 2: Germ cell mutagenicity – Category 2
 Carc. 1A: Carcinogenicity – Category 1A
 Repr. 1: Reproductive toxicity – Category 1
 Repr. 1B: Reproductive toxicity – Category 1B
 STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
 Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

- *** Data compared to the previous version altered.**

SDS created by MSDS Authoring Services www.msdsauthoring.com +1-877-204-9106