SAFETY DATA SHEETS

Stat-Q AEC Staining kit

Product No. NB314KLC / NB314KLC-20

SDS

Stable Peroxide Block

Biotin Conjugated Secondary Antibody

Peroxidase-conjugated Streptavidin

AEC Substrate/ Chromogen System

Company Innovex Biosciences Inc.
1099 Essex Ave
Richmond CA 94801
USA

Telephone 1-800-622-7808 (USA and Canada)

Emergency Telephone 510-234-6600

Fax 510-234-4591

Email Address support@innovexbio.com

SAFETY DATA SHEET

SDS **Stable Peroxide Block**

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1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name: **Stable Peroxide Block**

Other name of identification:
Product number: **HP1000**
Brand: **Innovex**

Manufacturer: Innovex Biosciences Inc.

1.2 Relevant Identified uses of the substance or mixture and uses advised against

Identified uses: Use in laboratories - Professional.

1.3 Details of the supplier of the safety data sheet

Company name: Innovex Biosciences Inc.
1099 Essex Ave
Richmond CA 94801
USA

Telephone: 1-800-622-7808
Fax: 510-234-4591

1.4 Emergency telephone number

Emergency Tel: 510-234-6600

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2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification under CHIP: This product has no classification under CHIP.
Classification under CLP: This product has no classification under CLP.

2.2 Label elements

This product has no label elements.

2.3 Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Mixtures

Hazardous ingredients: HYDROGEN PEROXIDE SOLUTION

EC	CAS	CHIP Classification
231-765-0	7722-84-1	R5; O: R8; Xn: R20/22; C: R35

CLP Classification	Percent
Ox. Liq. 1: H271; Acute Tox. 4: H332; Acute Tox. 4: H302; Skin Corr. 1A: H314	1-3%

For the full text of the H-Statements and others mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water.

Eye contact: Flush eyes with running water for 15 minutes.

Ingestion: Rise mouth with water**.** Never give anything by mouth to an unconscious person.

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed

Skin contact: There may be mild irritation and redness at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: There may be irritation of the throat.

Inhalation: There may be mild difficulty in breathing if inhaled in a poorly ventilated room.

Delayed / immediate effects: No data available.

4.3. Indication of any immediate medical attention and special treatment needed

Not applicable.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media
Suitable extinguishing media for the surrounding fire should be used.

5.2 Special hazards arising from the substance or mixture
In combustion emits toxic fumes.

5.3 Advice for fire-fighters
Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Avoid breathing vapors, mist or gas.
Turn leaking containers leak-side up to prevent the escape of liquid.
For personal protection see section 8.

6.2 Environmental precautions
Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3 Methods and materials for containment and cleaning up

Clean-up procedures
Absorb into dry earth or sand. Transfer to a closable, labeled salvage container for disposal by an appropriate method.

6.4 Reference to other sections
See section 8 and section 13 of SDS.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid direct contact with the substance.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool, well -ventilated area. Keep container tightly closed.

Recommended storage temperature 2-8^{o}c.

7.3 Specific end use(s)
Use in laboratories – Professional.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Hazardous ingredients: HYDROGEN PEROXIDE SOLUTION

Workplace exposure limits:

Country	8 hour TWA
UK	1.4 mg/m^3
IE	1.5 mg/m^3
US	1.4 mg/m^3
CA	1.4 mg/m^3
AU	1.4 mg/m^3
NZ	_

DNEL/PNEC Values
DNEL / PNEC: No data available.

8.2 Exposure controls

Engineering measures: Maintain general industrial hygiene practice.
Ensure all engineering measures mentioned in section 7 of SDS are in place.

Respiratory Protection: Respiratory protection not required.

Eye protection: Safety glasses. Ensure eye flushing at hand.

Skin protection: Protective clothing.

Hand protection: Handle with protective gloves.

Environmental: Prevent from entering into the immediate environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

State: Liquid
Color: Colorless

Odor:	Odorless
pH :	No data available
Evaporation Rate:	No data available
Oxidizing Properties:	No data available
Solubility in water:	No data available
Melting point/range °c:	No data available
Viscosity:	No data available
Boiling point/range °c:	No data available
Flammability (solid/gas):	No data available
Flammability (upper/lower) limit:	No data available
Flash point °c:	No data available
Auto-ignition temperature °c:	No data available
Relative density:	No data available
VOC g/l:	No data available
Partition coefficient: n-octanol/water:	No data available
Vapor pressure:	No data available
Explosive properties:	No data available

9.2 Other information: Not applicable.

10. STABILITY AND REACTIVITY

10.1 Reactivity
Stable under recommended transport or storage conditions.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4 Conditions to avoid
Heat.

10.5 Incompatible Materials
Strong oxidizing agents. Strong acids.

10.6 Hazardous decomposition products
In combustion emits toxic fumes.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Toxicity values: No data available.

Hazardous ingredients:

HYDROGEN PEROXIDE

ORAL	MOUSE	LD50	2	gm/kg
ORAL	RAT	LD50	376	mg/kg
SKIN	RAT	LD50	4060	mg/kg

Symptoms / routes of exposure

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Inhalation: There may be slight discomfort in breathing.

Ingestion: There may be irritation of the throat.

Delayed / immediate effects: No data available.

Other information: Not applicable.

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity values: No data available.

12.2 Persistence and degradability: Biodegradable.

12.3 Bioaccumulative potential: No bioaccumulation potential.

12.4 Mobility in soil: Readily absorbed into soil.

12.5 Results of PBT and vPvB assessment

PBT identifications: This product is not identified as a PBT/vPvB substance.

12.6 Other adverse effects: Negligible ecotoxicity.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal methods: Transfer to a suitable container and arrange for collection by licensed disposal company.

Disposal of packaging: Clean with water. Dispose of as normal industrial waste.The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

14. TRANSPORT INFORMATION

Transport class: This product does not require a classification for transport.

15. REGULATORY INFORMATION

SARA 302 Components
The following components are subject to reporting levels established by SARA Title III, Section 302:

	CAS-No.
Hydrogen peroxide	7722-84-1

SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313**.**

SARA 311/312 Hazards
Acute Heath Hazard, Chronic Health Hazard.

Massachusetts Right To Know Components

	CAS-No.
Hydrogen peroxide	7722-84-1

Pennsylvania Right To Know Components

	CAS-No.
Water	7732-18-5
Hydrogen peroxide	7722-84-1

New Jersey Right To Know Components

	CAS-No.
Water	7732-18-5
Hydrogen peroxide	7722-84-1

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive problems.

16. OTHER INFORMATION

HMIS Rating

Health hazard:	3
Flammability:	0
Reactivity:	0

NFPA Rating

Health hazard:	3
Flammability:	0
Reactivity:	0

Full text of the H-Statements and others used in section 2 and 3:

H271: May cause fire or explosion; strong oxidizer.
H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
H332: Harmful if inhaled.
R5: Heating may cause an explosion.
R8: Contact with combustible material may cause fire.
R20/22: Harmful by inhalation and if swallowed.
R35: Causes severe burns.

Abbreviations and acronyms used:

CLP = Classification, Labeling, and Packaging [Regulation (EC) No. 1272/2008]
DNEL = Derived No Effect Level
PNEC - Predicted No Effect Concentration

Legal disclaimer:

The above information is believed to be correct but does not purport to be all-inclusive and shall only be used as a guide. Innovex Biosciences, Inc. shall not be held liable for any damage resulting from contact or from handling the above product. Users should make their own investigations to determine the suitability of the information for their specific purposes.

SAFETY DATA SHEET

SDS Biotin conjugated Secondary Antibody

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name: **Biotin conjugated Secondary Antibody**

Other name of identification:
Product number: **NB314K and NB314K-20**
Brand: **Innovex**

Manufacturer: Innovex Biosciences Inc.

1.2 Relevant Identified uses of the substance or mixture and uses advised against

Identified uses: Use in laboratories - Professional.

1.3 Details of the supplier of the safety data sheet

Company name: Innovex Biosciences Inc.
1099 Essex Ave.
Richmond CA 94801
USA

Telephone: 1-800-622-7808
Fax: 510-234-4591

1.4 Emergency telephone number

Emergency Tel: 510-234-6600

2. HAZARDS IDENTIFICATION

2.1 Classification: GHS
Mixture, GHS category 5
Acute Aquatic 3 H402

Classification of the substance or mixture
Classification under CHIP: This product has no classification under CHIP.
Classification under CLP: This product has no classification under CLP.

2.2 GHS label elements, including precautionary statements:

GHS Symbol: none required.
GHS Hazard statement: May be harmful if swallowed.
GHS Precautionary statement: If swallowed call a poison center/doctor/physician.

2.3 Other hazards
PBT: This product is not identified as a PBT/vPvB substance.

---

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Mixtures
No components need to be disclosed according to the applicable regulations.

4. FIRST AID MEASURES

4.1 Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water.

Eye contact: Flush eyes with running water for 15 minutes.

Ingestion: Rise mouth with water**.** Never give anything by mouth to an unconscious person.

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed

Skin contact: There may be mild irritation and redness at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: There may be irritation of the throat.

Inhalation: There may be mild difficulty in breathing if inhaled in a poorly ventilated room.

Delayed / immediate effects: No data available.

4.3. Indication of any immediate medical attention and special treatment needed
Not applicable.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media
Suitable extinguishing media for the surrounding fire should be used.

5.2 Special hazards arising from the substance or mixture
Not flammable or combustible.

5.3 Advice for fire-fighters
Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Turn leaking containers leak-side up to prevent the escape of liquid.
For personal protection see section 8.

6.2 Environmental precautions
Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3 Methods and materials for containment and cleaning up

Clean-up procedures
Absorb into dry earth or sand. Transfer to a closable, labeled salvage container for disposal by an appropriate method.

6.4 Reference to other sections
See section 8 and section 13 of SDS.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid direct contact with the substance.

7.2 Conditions for safe storage, including any incompatibilities
Store at 2-8^{o}c. Keep container tightly closed.

7.3 Specific end use(s)
Use in laboratories - Professional.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

This product or any of its ingredients have no listed OSHA PEL, NIOSH REL, or ACGIH Threshold Limit Values (TLV).

Exposure limit: No data available.

DNEL/PNEC Values

DNEL / PNEC: No data available.

8.2 Exposure controls

Engineering measures: Maintain general industrial hygiene practice.
Ensure all engineering measures mentioned in section 7 of SDS are in place.

Respiratory Protection: Respiratory protection not required.

Eye protection: Safety glasses. Ensure eye flushing at hand.

Skin protection: Protective clothing.

Hand protection: Handle with protective gloves.

Environmental: Prevent from entering into the immediate environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

State:	Liquid
Color:	Yellow
Odor:	Odorless
pH :	7 to 7.4
Evaporation Rate:	No data available
Oxidizing Properties:	No data available
Solubility in water:	Soluble in cold and warm water

Melting point/range °c:	No data available
Viscosity:	No data available
Boiling point/range °c:	No data available
Flammability (solid/gas):	No data available
Flammability (upper/lower) limit:	No data available
Flash point °c:	No data available
Auto-ignition temperature °c:	No data available
Relative density:	No data available
VOC g/l:	No data available
Partition coefficient: n-octanol/water:	No data available
Vapor pressure:	No data available
Explosive properties:	No data available

9.2 Other information: Not applicable.

10. STABILITY AND REACTIVITY

10.1 Reactivity
Stable under recommended transport or storage conditions.

10.2 Chemical stability
This product is chemically stable.

10.3 Possibility of hazardous reactions
Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid
Heat.

10.5 Incompatible Materials
No specific data.

10.6 Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products will not be produced.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:
RTECS#: VY8050000; CAS# 26628-22-8; EC# 247-852-1
RTECS#: V24725000; CAS# 7647-14-5; EC# 231-598-3

Acute toxicity:
Sodium Azide: Oral Rat, LD50, 27 mg/kg
Sodium Chloride: Oral Rat, LD50, 3,000 mg/kg
Sodium Phosphate: Oral Rat, LD50, 17,000 mg/kg
Antibody/Serum Protein: Not established

Symptoms / routes of exposure

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Inhalation: No known significant effects or critical hazards

Ingestion: There may be irritation of the throat.

Delayed / immediate effects: No data available.

Other information: Not applicable.

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12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity values: Avoid release into environment.

12.2 Persistence and degradability: Biodegradable.

12.3 Bioaccumulative potential: No bioaccumulation potential.

12.4 Mobility in soil: No data available.

12.5 Results of PBT and vPvB assessment: This product is not identified as a PBT/vPvB substance.

12.6 Other adverse effects: Negligible ecotoxicity.

---

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal methods: Transfer to a suitable container and arrange for collection by licensed disposal company.

Disposal of packaging: Dispose of as normal industrial waste. The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

14. TRANSPORT INFORMATION

Transport class: This product does not require a classification for transport.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations specific for the product in question: EU Regulation (EC) No. 1907/2006 (REACH):
Annex XIV- List of substances subject to authorization:
Substance of very high concern: None of the components are listed.
Annex XVII- Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles: Not applicable.

15.2 Other EU Regulations:
Europe inventory: Not determined.
Black List Chemicals: Not listed.
Priority List Chemicals: Not listed.
Integrated pollution prevention and control list (IPPC) – Air: Not listed.
IPPC- Water: Not listed.

15.3 National regulations: Data not available.

United States of America GHS

15.4 SARA Reporting Requirements: This product is not subject to Section 302, 304 and 313 reporting requirements under the Superfund Amendment and Reauthorization Act.

Chemical SARA 302, SARA 304 and SARA 313
SARA Threshold Planning Quatity: N/A
TSCA Inventory Status: N/A
CERCLA Reporting Quantity (RQ): N/A
Other Federal Regulations: N/A

16. OTHER INFORMATION

Abbreviations and acronyms used:
CLP = Classification, Labeling, and Packaging [Regulation (EC) No. 1272/2008]
DNEL = Derived No Effect Level
PNEC - Predicted No Effect Concentration

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]: Not classified

Literature used in preparation of this GHS/SDS: Globally Harmonized System of Classification and Labeling of Chemicals
(GHS), Fourth Revised Edition, United Nations, New York and Geneva, 2011

Legal disclaimer:
The above information is believed to be correct but does not purport to be all-inclusive and shall only be used as a guide. Innovex Biosciences, Inc. shall not be held liable for any damage resulting from contact or from handling the above product. Users should make their own investigations to determine the suitability of the information for their specific purposes.

SAFETY DATA SHEET

SDS Peroxidase-conjugated Streptavidin

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name: **Peroxidase-conjugated Streptavidin**

Other name of identification:
Product number: **NB314L and NB314L-20**
Brand: **Innovex**

Manufacturer: Innovex Biosciences Inc.

1.2 Relevant Identified uses of the substance or mixture and uses advised against

Identified uses: Use in laboratories - Professional.

1.3 Details of the supplier of the safety data sheet

Company name: Innovex Biosciences Inc.
1099 Essex Ave.
Richmond CA 94801
USA

Telephone: 1-800-622-7808
Fax: 510-234-4591

1.4 Emergency telephone number

Emergency Tel: 510-234-6600

2. HAZARDS IDENTIFICATION

2.1 Classification : GHS

Mixture, not a hazardous substance.

Classification under CHIP: This product has no classification under CHIP.
Classification under CLP: This product has no classification under CLP.

2.2 GHS label elements, including precautionary statements:
Not a hazardous substance.

GHS Symbol: not required.
GHS Hazard statement: Not a hazardous substance
GHS Precautionary statement: None

2.3 Other hazards
PBT: This product is not identified as a PBT/vPvB substance.

---

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Mixtures
No components need to be disclosed according to the applicable regulations.

---

4. FIRST AID MEASURES

4.1 Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water.

Eye contact: Flush eyes with running water for 15 minutes.

Ingestion: Rise mouth with water**.** Never give anything by mouth to an unconscious person.

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed

Skin contact: There may be mild irritation and redness at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: There may be irritation of the throat.

Inhalation: There may be mild difficulty in breathing if inhaled in a poorly ventilated room.

Delayed / immediate effects: No data available.

4.3. Indication of any immediate medical attention and special treatment needed
Not applicable.

---

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media
Suitable extinguishing media for the surrounding fire should be used.

5.2 Special hazards arising from the substance or mixture
Not flammable or combustible.

5.3 Advice for fire-fighters
Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

---

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Turn leaking containers leak-side up to prevent the escape of liquid.
For personal protection see section 8.

6.2 Environmental precautions
Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3 Methods and materials for containment and cleaning up

Clean-up procedures
Absorb into dry earth or sand. Transfer to a closable, labeled salvage container for disposal by an appropriate method.

6.4 Reference to other sections
See section 8 and section 13 of SDS.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid direct contact with the substance.

7.2 Conditions for safe storage, including any incompatibilities
Store at 2-8^{o}c. Keep container tightly closed.

7.3 Specific end use(s)
Use in laboratories - Professional.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

This product or any of its ingredients have no listed OSHA PEL, NIOSH REL, or ACGIH Threshold Limit Values (TLV).

DNEL/PNEC Values

DNEL / PNEC: No data available.

8.2 Exposure controls

Engineering measures: Maintain general industrial hygiene practice.
Ensure all engineering measures mentioned in section 7 of SDS are in place.

Respiratory Protection: Respiratory protection not required.

Eye protection: Safety glasses. Ensure eye flushing at hand.

Skin protection: Protective clothing.

Hand protection: Handle with protective gloves.

Environmental: Prevent from entering into the immediate environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

State:	Liquid
Color:	Red
Odor:	Odorless
pH :	7.2-7.4
Evaporation Rate:	No data available
Oxidizing Properties:	No data available
Solubility in water:	Soluble in cold and warm water

Melting point/range °c:	No data available
Viscosity:	No data available
Boiling point/range °c:	No data available
Flammability (solid/gas):	No data available
Flammability (upper/lower) limit:	No data available
Flash point °c:	No data available
Auto-ignition temperature °c:	No data available
Relative density:	No data available
VOC g/l:	No data available
Partition coefficient: n-octanol/water:	No data available
Vapor pressure:	No data available
Explosive properties:	No data available

9.2 Other information: Not applicable.

10. STABILITY AND REACTIVITY

10.1 Reactivity
Stable under recommended transport or storage conditions.

10.2 Chemical stability
This product is chemically stable.

10.3 Possibility of hazardous reactions
Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid
Heat.

10.5 Incompatible Materials
No specific data.

10.6 Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products will not be produced.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:
RTECS#: V24725000; CAS# 7647-14-5; EC# 231-598-3

Acute toxicity:
Sodium Chloride: Oral Rat, LD50, 3,000 mg/kg
Sodium Phosphate: Oral Rat, LD50, 17,000 mg/kg
Symptoms / routes of exposure

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Inhalation: No known significant effects or critical hazards.

Ingestion: There may be irritation of the throat.

Delayed / immediate effects: No data available.

Other information: Not applicable.

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12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity values: Avoid release into environment.

12.2 Persistence and degradability: Biodegradable.

12.3 Bioaccumulative potential: No bioaccumulation potential.

12.4 Mobility in soil: No data available.

12.5 Results of PBT and vPvB assessment: This product is not identified as a PBT/vPvB substance.

12.6 Other adverse effects: Negligible ecotoxicity.

---

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal methods: Transfer to a suitable container and arrange for collection by licensed disposal company.

Disposal of packaging: Dispose of as normal industrial waste.The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

14. TRANSPORT INFORMATION

Transport class: This product does not require a classification for transport.

15. REGULATORY INFORMATION

15.1 Safety, health, and environmental regulations specific for the product in question:
EU Regulation (EC) No. 1907/2006 (REACH):
Annex XIV - List of substances subject to authorization:
Substances of very high concern: None of the components are listed.
Annex XVII - Restrictions on the manufacture, placing on the market, and use of certain dangerous substances, mixtures, and articles: Not applicable

15.2 Other EU Regulations:
Europe inventory: Not determined.
Black List Chemicals: Not listed.
Priority List Chemicals: Not listed.
Integrated pollution prevention and control list (IPPC) - Air: Not listed.
IPPC- Water: Not listed.

15.3 National regulations: Data not available

United States of America GHS

15.4 SARA Reporting Requirements: This product is not subject to Section 302, 304, and 313 reporting requirements under the Superfund Amendment and Reauthorization Act.

Chemical SARA 302, SARA 304, and SARA 313
SARA Threshold Planning Quantity: N/A
TSCA Inventory Status: N/A
CERCLA Reporting Quantity (RQ): N/A
Other Federal Regulations: N/A

16. OTHER INFORMATION

Abbreviations and acronyms used:
CLP = Classification, Labeling, and Packaging [Regulation (EC) No. 1272/2008]
DNEL = Derived No Effect Level
PNEC - Predicted No Effect Concentration

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]: Not classified

Literature used in preparation of this GHS/SDS: Globally Harmonized System of Classification and Labeling of Chemicals (GHS), Fourth Revised Edition, United Nations, New York and Geneva, 2011

Legal disclaimer:
The above information is believed to be correct but does not purport to be all-inclusive and shall only be used as a guide. Innovex Biosciences, Inc. shall not be held liable for any damage resulting from contact or from handling the above product. Users should make their own investigations to determine the suitability of the information for their specific purposes.

SAFETY DATA SHEET

SDS AEC Substrate/ Chromogen System

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name: **AEC Substrate/ Chromogen System**

Other name of identification:
Product number: **NB314SCS**
Brand: **Innovex**

Manufacturer: Innovex Biosciences Inc.

REACH Registration No.: Registration numbers are not available for some or all of the substance ingredients of this mixture as the substance(s) or its uses are exempt from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

1.2 Relevant Identified uses of the substance or mixture and uses advised against

Identified uses: Use in laboratories - Professional.

1.3 Details of the supplier of the safety data sheet

Company name: Innovex Biosciences Inc.
1099 Essex Ave.
Richmond CA 94801
USA

Telephone: 1 800-622-7808
Fax: 510-234-4591

1.4 Emergency telephone number

Emergency Tel: 510-234-6600

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Skin irritation (Category 2), H315
Eye damage (Category 1), H318

For the full detail of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements including precautionary statements

Pictogram

Signal word Danger

Hazard statement(s)

H315	Causes skin irritation.
H318	Causes eye damage.
H350	May cause cancer
H360	May damage fertility or the unborn child.

Precautionary statement(s)

P264	Wash skin thoroughly after handling.
P280	Wear protective gloves/ eye protection/ face protection.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
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 or doctor/ physician.
P321	Specific treatment (see supplemental first aid instructions on this label).
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.

2.3 Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

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3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Mixtures

Ingredients:

Chemical Name	CAS-No	Weight %	Classification (Reg. 1272/2008)
AEC	132-32-1	0.1-1	Acute Tox. 3 (H301) Carc. 1B (H350)
DMF	68-12-2	1-5	Eye Irrit. 2 (H319) Repr. 1B (H360D) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Flam Liq. 3 (H226)
Hydrogen peroxide	7722-84-1	<0.1	Acute Tox. 4 (H302) Acute Tox. 4 (H332) Skin Corr. 1A (H314) Eye Dam. 1 (H318)

For the full detail of the H-Statements mentioned in this Section, see Section 16

4. FIRST AID MEASURES

4.1 Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water. Consult a doctor.

Eye contact: Flush eyes with running water. Remove any contact lenses and continue flushing for 15 minutes. Seek medical advice.

Ingestion: Do not induce vomiting. Rinse mouth with water. Never give anything by mouth to an unconscious person. Consult a doctor.

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed

Skin contact: There may be irritation and redness at the site of contact.
Eye contact: There may be irritation and redness. The eyes may water profusely.
Ingestion: There may be soreness and redness of the mouth and throat. Stomach pain and nausea may occur. There may be vomiting.

Inhalation: There may be irritation of the throat with a feeling of chest tightness.

Delayed / immediate effects: Effects can be seen immediately after short-term exposure.

4.3. Indication of any immediate medical attention and special treatment needed
Not applicable.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media
Suitable extinguishing media for the surrounding fire should be used.

5.2 Special hazards arising from the substance or mixture
In combustion emits toxic fumes.

5.3 Advice for fire-fighters
Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Avoid breathing vapors, mist or gas.
Turn leaking containers leak-side up to prevent the escape of liquid.
For personal protection see section 8.

6.2 Environmental precautions
Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3 Methods and materials for containment and cleaning up

Clean-up procedures
Clean-up should be done only by a qualified personnel. Absorb into dry earth or sand. Transfer to a closable, labeled salvage container for disposal by an appropriate method.

6.4 Reference to other sections
See section 8 and section 13 of SDS.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid direct contact with the substance.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool, dry and well -ventilated area. Keep container tightly closed.

Recommended storage temperature: 2-8^{o}c.

7.3 Specific end use(s)

Use in laboratories - Professional.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure Guidelines:

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hydrogen peroxide 7722-84-1	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m3 (vacated) TWA: 1 ppm (vacated) TWA: 1.4 mg/m3	IDLH: 75 ppm TWA: 1 ppm TWA: 1.4 mg/m3
DMF 68-12-2	TWA: 10 ppm S*	TWA: 10 ppm TWA: 30 mg/m3 (vacated) TWA: 10 ppm (vacated) TWA: 30 mg/m3 (vacated) S* S*	IDLH: 500 ppm TWA: 10 ppm TWA: 30 mg/m3

NIOSH IDLH: Immediately Dangerous to Life or Health

DNEL/PNEC Values

DNEL / PNEC: No data available.

8.2 Exposure controls

Engineering measures: Maintain general industrial hygiene practice.
Ensure engineering measures mentioned in section 7 of SDS are in place.

Respiratory Protection: Respiratory protection must be made available in case of emergency.

Eye protection: Safety glasses with side shields. Ensure eye flushing at hand.

Skin protection: Protective clothing.

Hand protection: Handle with protective gloves.

Hygiene Measures: When using, do not eat, drink or smoke. Provide regular cleaning of equipment , work area and clothing. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Keep away from food, drink and animal feeding stuffs.

Environmental: Observe all engineering measures mentioned in Section 7 of SDS. Prevent from entering into the immediate environment and into public sewers.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

State:	Liquid
Odor:	Odorless
pH:	No data available
Evaporation Rate:	No data available
Oxidizing Properties:	No data available
Solubility in water:	No data available
Melting point/range ^{o}c:	No data available
Viscosity:	No data available
Boiling point/range ^{o}c :	No data available
Flammability (solid/gas):	No data available
Flammability (upper/lower) limit:	No data available
Flash point ^{o}c :	No data available
Auto-ignition temperature ^{o}c :	No data available
Relative density:	No data available
VOC Content g/l :	No data available
Partition coefficient: n-octanol/water:	No data available
Vapor pressure:	No data available
Explosive properties:	No data available

9.2 Other information: Not applicable.

10. STABILITY AND REACTIVITY

10.1 Reactivity
Stable under recommended transport or storage conditions.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4 Conditions to avoid
Heat

10.5 Incompatible Materials
No data available.

10.6 Hazardous decomposition products
In combustion emits toxic fumes.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Toxicity values:

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
DMF	200 mg/kg (Rat)	3.2 g/kg (Rat)	
AEC	144 mg/kg (Rat)		
Hydrogen peroxide	801 mg/kg (Rat)	4060 mg/kg (Rat) 2000 mg/kg (Rabbit)	2 mg/L (Rat) 4 h

Symptoms / routes of exposure

Skin contact: There may be irritation at the site of contact.

Eye contact: There may be irritation and redness, eyes may water excessively.

Inhalation: There may be irritation of the throat with a feeling of chest tightness.

Ingestion: There may be soreness and redness of the mouth and throat. Stomach pain may occur. There may be vomiting.

Delayed / immediate effects: Immediate effects can be expected after short –term exposure.

Other information: Not applicable

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity values:

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
DMF	500: 96 h Desmodesmus subspicatus mg/L EC50	6300: 96 h Lepomis macrochirus mg/L LC50 9800: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 10410: 96 h Pimephales promelas mg/L LC50 flow-through	7500: 48 h Daphnia magna mg/L EC50 8485: 48 h Daphnia magna mg/L EC50 semi-static 6800 - 13900: 48 h Daphnia magna mg/L EC50 Static
Hydrogen peroxide	2.5: 72 h Chlorella vulgaris mg/L EC50	16.4: 96 h Pimephales promelas mg/L LC50 18-56: 96 h Lepomis macrochirus mg/L LC50 static 10.0-32.0: 96 h Oncorhynchus mykiss mg/L LC50 static	7.7: 24 h Daphnia magna mg/L EC50 18 - 32: 48 h Daphnia magna mg/L EC50 Static

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal methods: Transfer to a suitable container and arrange for collection by licensed disposal company.

Contaminated packaging: Do not re-use empty containers.

Disposal of packaging: Arrange for collection by specialized disposal company. The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	**California Hazardous Waste Status**
Hydrogen peroxide	Toxic Corrosive Ignitable Reactive

14. TRANSPORT INFORMATION

Transport class: This product does not require a classification for transport.

DOT: Not dangerous goods.
IATA: Not dangerous goods.
ADR: Not dangerous goods.

14.1 to 14.7 subsections do not apply, but as with all chemicals, packages containing, this substance should be handled with methods that minimizes the risk of damage to and leakage from packages.

15. REGULATORY INFORMATION

SARA 313 Components

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA).This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No.
DMF	68-12-2

SARA 311/312 Hazards

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
DMF	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ
Hydrogen peroxide		1000 lb	

U.S. State Regulations

California Prop. 65 Components

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Massachusetts Right To Know Components

	CAS-No.
DMF	68-12-2
Hydrogen peroxide	7722-84-1

New Jersey Right To Know Components

	CAS-No.
DMF	68-12-2
Hydrogen peroxide	7722-84-1

Pennsylvania Right To Know Components

	CAS-No.
DMF	68-12-2
Hydrogen peroxide	7722-84-1

Illinois Right To Know Components

	CAS-No.
DMF	68-12-2

Rhoda Island Right To Know Components

	CAS-No.
DMF	68-12-2
Hydrogen peroxide	7722-84-1

16. OTHER INFORMATION

Kit component
Liquid AEC Substrate/ Chromogen INNOVEX Biosciences NB314SCS
For immunohistochemistry

Full detail of the H-Statements mentioned in Section 2 and 3:
H315: Causes skin irritation.
H318: Causes serious eye damage.
H226 - Flammable liquid and vapor.
H301 - Toxic if swallowed.
H314 - Causes severe skin burns and eye damage.
H318 - Causes serious eye damage
H319 - Causes serious eye irritation.
H350- May cause cancer if swallowed.
H360D - May damage the unborn child.
Hazard statements
H319 - Causes serious eye irritation.
H350 - May cause cancer.
H360 - May damage fertility or the unborn child

Abbreviations and acronyms used:
DNEL = Derived No Effect Level
PNEC - Predicted No Effect Concentration

Legal disclaimer:
The above information is believed to be correct but does not purport to be all-inclusive and shall only be used as a guide. Innovex Biosciences, Inc. shall not be held liable for any damage resulting from contact or from handling the above product. Users should make their own investigations to determine the suitability of the information for their specific purposes.