

---

# SAFETY DATA SHEET

## SDS

### DAB Substrate buffer, component 1

---

#### 1. PRODUCT AND COMPANY IDENTIFICATION

##### 1.1 Product identifiers

Product name: **DAB Substrate buffer, component 1**

Product number: NB314SB (component 1)

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: 510-234-660

---

#### 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

<b>EC</b> 231-765-0	<b>CAS</b> 7722-84-1	<b>CHIP Classification</b> R5; O: R8; Xn: R20/22; C: R35
<b>CLP Classification</b> Ox. Liq. 1: H271; Acute Tox. 4: H332; Acute Tox. 4: H302; Skin Corr. 1A: H314		<b>Percent</b> 1-5%

---

### 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:** Never give anything by mouth to an unconscious person. Rinse mouth with water.

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

#### 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:** No symptoms.

**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 bonding.

**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°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 <sup>3</sup>
IE	1.5 mg/m <sup>3</sup>
US	1.4 mg/m <sup>3</sup>
CA	1.4 mg/m <sup>3</sup>
AU	1.4 mg/m <sup>3</sup>
NZ	—

### DNEL/PNEC Values

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

### 8.2 Exposure controls

**Engineering measures:** General industrial hygiene practice.  
Ensure 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

<b>Evaporation Rate:</b>	No data available
<b>Oxidizing Properties:</b>	No data available
<b>Solubility in water:</b>	No data available
<b>Melting point/range °c:</b>	No data available
<b>Viscosity:</b>	No data available
<b>Boiling point/range °c:</b>	No data available
<b>Flammability (solid/gas):</b>	No data available
<b>Flammability (upper/lower) limit:</b>	No data available
<b>Flash point °c:</b>	No data available
<b>Auto-ignition temperature °c:</b>	No data available
<b>Relative density:</b>	No data available
<b>VOC g/l:</b>	No data available
<b>Partition coefficient: n-octanol/water:</b>	No data available
<b>Vapor pressure:</b>	No data available
<b>Explosive properties:</b>	No data available
<b>9.2 Other information:</b>	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:** No symptoms.

**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 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

None of the ingredients is listed.

#### 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 harm.

---

## 16. OTHER INFORMATION

### Kit Component

Liquid substrate buffer  
for DAB, component 1, for  
immunohistochemical staining

INNOVEX Biosciences

NB314SB

### HMIS Rating

Health hazard: 0  
Flammability: 0  
Reactivity: 0

### NFPA Rating

Health hazard: 0  
Flammability: 0  
Reactivity: 0

### Phrases used in s.3:

H271: May cause fire or explosion; strong oxidiser.  
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.

### 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

### Liquid DAB chromogen, component 2

---

#### 1. PRODUCT AND COMPANY IDENTIFICATION

##### 1.1 Product identifiers

Product name: **Liquid DAB chromogen, component 2**

Product number: NB314D (component 2)

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.

##### 1.4 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: 510-234-660

---

#### 2. HAZARDS IDENTIFICATION

##### 2.1 Classification of the substance or mixture

**Classification under CHIP:** Xn: R22; T: R45; Xn: R68

**Classification under CLP:** Acute Tox. 4: H302; Muta. 2: H341; Carc. 1B: H350

**Most important adverse effects:** Harmful if swallowed. Suspected of causing genetic defects and cancer.

## 2.2 Label elements

**Label elements under CHIP:**

**Hazard symbols: Toxic**



**Risk phrases:** R22: Harmful if swallowed.  
R45: May cause cancer.  
R68: Possible risk of irreversible effects.

**Safety phrases:** S36/37: Wear suitable protective clothing and gloves.  
S53: Avoid exposure - obtain special instructions before use.  
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**Precautionary phrases:** Restricted to professional users.

**Label elements under CLP:**

**Hazard statements:** H302: Harmful if swallowed.  
H341: Suspected of causing genetic defects.  
H350: May cause cancer.

**Signal words:** Danger

**Hazard pictograms:** GHS07: Exclamation mark  
GHS08: Health hazard



**Precautionary statements:** P201: Obtain special instructions before use.  
P202: Do not handle until all safety precautions have been read and understood.  
P281: Use personal protective equipment as required.  
P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.  
P301+312: IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.  
P330: Rinse mouth.  
P308+313: IF exposed or concerned: Get medical advice/attention.

### 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:**

#### 3,3' DIAMINOBENZIDINE TETRAHYDROCHLORIDE HYDRATE

EC	CAS	CLP Classification	CHIP Classification	Percent
231-018-9	868272-85-9	Muta. 2: H341; Carc. 1B: H350	T: R45; Xn: R68	1-5%

---

## 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 for 15 minutes. Seek medical advice.

**Ingestion:** 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 mild 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 bonding.
- 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°C.

**7.3 Specific end use(s)**

Use in laboratories - Professional.

---

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**8.1 Control parameters**

**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 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.

**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

**Color:** Brown

**Odor:** Odorless

**pH:** No data available

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

Avoid 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.

**Relevant effects for mixture:**

Effect	Route
Acute Toxicity (harmful)	ING
Carcinogenicity	-

**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:** 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 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:** Arrange for collection by specialised disposal company. 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.

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 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### **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**

No SARA Hazards.

#### **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 harm.

---

### **16. OTHER INFORMATION**

**Kit component**



Liquid DAB chromogen, Component 2  
For immunohistochemistry

INNOVEX Biosciences NB314D

**HMIS Ratin**

Health hazard: 0

Flammability: 0

Reactivity: 0

**NFPA Rating**

Health hazard: 0

Flammability: 0

Reactivity: 0

**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.