IFA Conjugate with Evans Blue
Safety Data Sheet
According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Revision Date: 06/11/2015  Date of issue: 06/11/2015
Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier
Product Form: Mixture
Product Name: IFA Conjugate with Evans Blue

1.2. Intended Use of the Product
Diagnostic Test Component

1.3. Name, Address, and Telephone of the Responsible Party
Company
Zeus Scientific, Inc.
200 Evans Way
Branchburg, NJ 08876
USA
T 908-526-3744 (Continental USA)
T 800-286-2111 (Additional Information)
www.zeusscientific.com

1.4. Emergency Telephone Number
Emergency Number : 908-526-3744

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture
Classification (GHS-US)
Carc. 1B  H350
Full text of H-phrases: see section 16

2.2. Label Elements
GHS-US Labeling
Hazard Pictograms (GHS-US):

Signal Word (GHS-US) : Danger
Hazard Statements (GHS-US) : H350 - May cause cancer.
Precautionary Statements (GHS-US) : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P280 - Wear protective gloves, protective clothing, and eye protection.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P405 - Store locked up.
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards
Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US) No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances
Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>% (w/w)</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium azide</td>
<td>(CAS No) 26628-22-8</td>
<td>0.1</td>
<td>Acute Tox. 2 (Oral), H300</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Acute Tox. 1 (Dermal), H310</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STOT RE 2, H373</td>
</tr>
</tbody>
</table>

EN (English US)
(IFA PSD-00005) 1 (CPro Rev. Date 07/26/2016)
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| Direct Blue 53 (CAS No) 314-13-6 | Aquatic Acute 1, H400 | Carc. 1B, H350 |

Full text of H-phrases: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of First Aid Measures

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

**Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

**Skin Contact:** Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.

**Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

**Ingestion:** Do NOT induce vomiting. Rinse mouth. If a large amount is swallowed call a POISON CENTER or doctor.

### 4.2. Most Important Symptoms and Effects Both Acute and Delayed

**General:** May cause cancer.

**Inhalation:** Overexposure may be irritating to the respiratory system.

**Skin Contact:** Contact during a long period may cause slight irritation.

**Eye Contact:** Direct contact with the eyes is likely irritating.

**Ingestion:** Ingestion is not likely to be harmful or have adverse effects.

**Chronic Symptoms:** May cause cancer.

### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

## SECTION 5: FIRE-FIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Use extinguishing media appropriate for surrounding fire.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not considered flammable but may burn at high temperatures.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions.

### 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Hazardous Combustion Products:** Carbon oxides (CO, CO₂).

### Reference to Other Sections

Refer to section 9 for flammability properties.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Avoid all unnecessary exposure.

#### 6.1.1. For Non-Emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Personnel

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material, then place in suitable container. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8, Exposure Controls and Personal Protection. See Section 13, Disposal Considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.


7.3. Specific End Use(s)

Diagnostic Test Component

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

<table>
<thead>
<tr>
<th>Sodium azide (26628-22-8)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>USA ACGIH</td>
<td>ACGIH Ceiling (mg/m³)</td>
<td>0.29 mg/m³</td>
</tr>
<tr>
<td>USA ACGIH</td>
<td>ACGIH Ceiling (ppm)</td>
<td>0.11 ppm (vapor)</td>
</tr>
<tr>
<td>USA ACGIH</td>
<td>ACGIH chemical category</td>
<td>Not Classifiable as a Human Carcinogen</td>
</tr>
<tr>
<td>USA NIOSH</td>
<td>NIOSH REL (ceiling) (mg/m³)</td>
<td>0.3 mg/m³</td>
</tr>
<tr>
<td>USA NIOSH</td>
<td>NIOSH REL (ceiling) (ppm)</td>
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</tr>
<tr>
<td>Alberta</td>
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<td>0.29 mg/m³</td>
</tr>
<tr>
<td>Alberta</td>
<td>OEL Ceiling (ppm)</td>
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</tr>
<tr>
<td>British Columbia</td>
<td>OEL Ceiling (mg/m³)</td>
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</tr>
<tr>
<td>British Columbia</td>
<td>OEL Ceiling (ppm)</td>
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</tr>
<tr>
<td>Manitoba</td>
<td>OEL Ceiling (mg/m³)</td>
<td>0.29 mg/m³</td>
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<tr>
<td>Manitoba</td>
<td>OEL Ceiling (ppm)</td>
<td>0.11 ppm (vapor)</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>OEL Ceiling (mg/m³)</td>
<td>0.29 mg/m³</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>OEL Ceiling (ppm)</td>
<td>0.11 ppm (vapor)</td>
</tr>
<tr>
<td>Newfoundland &amp; Labrador</td>
<td>OEL Ceiling (mg/m³)</td>
<td>0.29 mg/m³</td>
</tr>
<tr>
<td>Newfoundland &amp; Labrador</td>
<td>OEL Ceiling (ppm)</td>
<td>0.11 ppm (vapor)</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>OEL Ceiling (mg/m³)</td>
<td>0.29 mg/m³</td>
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<tr>
<td>Nova Scotia</td>
<td>OEL Ceiling (ppm)</td>
<td>0.11 ppm (vapor)</td>
</tr>
<tr>
<td>Nunavut</td>
<td>OEL Ceiling (mg/m³)</td>
<td>0.27 mg/m³</td>
</tr>
<tr>
<td>Nunavut</td>
<td>OEL Ceiling (ppm)</td>
<td>0.1 ppm</td>
</tr>
<tr>
<td>Northwest Territories</td>
<td>OEL Ceiling (mg/m³)</td>
<td>0.27 mg/m³</td>
</tr>
<tr>
<td>Northwest Territories</td>
<td>OEL Ceiling (ppm)</td>
<td>0.1 ppm</td>
</tr>
<tr>
<td>Ontario</td>
<td>OEL Ceiling (mg/m³)</td>
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<tr>
<td>Ontario</td>
<td>OEL Ceiling (ppm)</td>
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</tr>
<tr>
<td>Prince Edward Island</td>
<td>OEL Ceiling (mg/m³)</td>
<td>0.29 mg/m³</td>
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<tr>
<td>Prince Edward Island</td>
<td>OEL Ceiling (ppm)</td>
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</tr>
<tr>
<td>Québec</td>
<td>PLA FOND (mg/m³)</td>
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</tr>
<tr>
<td>Québec</td>
<td>PLA FOND (ppm)</td>
<td>0.11 ppm</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>OEL Ceiling (mg/m³)</td>
<td>0.29 mg/m³</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>OEL Ceiling (ppm)</td>
<td>0.11 ppm</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Yukon</th>
<th>OEL Ceiling (mg/m³)</th>
<th>0.3 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yukon</td>
<td>OEL Ceiling (ppm)</td>
<td>0.1 ppm</td>
</tr>
</tbody>
</table>

8.2. Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment: Not generally required. The use of personal protective equipment may be necessary as conditions warrant.

Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: In case of repeated or prolonged contact wear gloves.

Eye Protection: In case of splash hazard: chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

Environmental Exposure Controls: Do not allow the product to be released into the environment.

Consumer Exposure Controls: Do not eat, drink or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State: Liquid

Appearance: Not available

Odor: Not available

Odor Threshold: Not available

pH: Not available

Evaporation Rate: Not available

Melting Point: Not available

Freezing Point: Not available

Boiling Point: Not available

Flash Point: Not available

Auto-ignition Temperature: Not available

Decomposition Temperature: Not available

Flammability (solid, gas): Not available

Lower Flammable Limit: Not available

Upper Flammable Limit: Not available

Vapor Pressure: Not available

Relative Vapor Density at 20 °C: Not available

Relative Density: Not available

Specific Gravity: Not available

Solubility: Not available

Partition Coefficient: N-Octanol/Water: Not available

Viscosity: Not available

Explosion Data – Sensitivity to Mechanical Impact: Not expected to present an explosion hazard due to mechanical impact.

Explosion Data – Sensitivity to Static Discharge: Not expected to present an explosion hazard due to static discharge.
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SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Hazardous reactions will not occur under normal conditions.
10.2. Chemical Stability: Stable under recommended handling and storage conditions (see section 7).
10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
10.4. Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Incompatible materials.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product
Acute Toxicity: Not classified
LD50 and LC50 Data: Not available
Skin Corrosion/Irritation: Not classified
Serious Eye Damage/Irritation: Not classified
Respiratory or Skin Sensitization: Not classified
Germ Cell Mutagenicity: Not classified
Teratogenicity: Not classified
Carcinogenicity: May cause cancer.
Specific Target Organ Toxicity (Repeated Exposure): Not classified
Reproductive Toxicity: Not classified
Specific Target Organ Toxicity (Single Exposure): Not classified
Aspiration Hazard: Not classified
Symptoms/Injuries After Inhalation: Overexposure may be irritating to the respiratory system.
Symptoms/Injuries After Skin Contact: Contact during a long period may cause slight irritation.
Symptoms/Injuries After Eye Contact: Direct contact with the eyes is likely irritating.
Symptoms/Injuries After Ingestion: Ingestion is not likely to be harmful or have adverse effects.
Chronic Symptoms: May cause cancer.

11.2. Information on Toxicological Effects - Ingredient(s)
LD50 and LC50 Data:

<table>
<thead>
<tr>
<th>Substance</th>
<th>LD50 Oral Rat</th>
<th>LC50 Fish 1</th>
<th>LC50 Fish 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium azide (26628-22-8)</td>
<td>27 mg/kg</td>
<td>0.8 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)</td>
<td>0.7 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)</td>
</tr>
<tr>
<td>ATE US (dermal)</td>
<td>5.00 mg/kg body weight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct Blue 53 (314-13-6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IARC Group</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

12.2. Persistence and Degradability: Not available
12.3. Bioaccumulative Potential: Not available
12.4. Mobility in Soil: Not available
12.5. Other Adverse Effects: Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods
Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.
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SECTION 14: TRANSPORT INFORMATION
14.1. In Accordance with DOT Not regulated for transport
14.2. In Accordance with IMDG Not regulated for transport
14.3. In Accordance with IATA Not regulated for transport
14.4. In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION
15.1. US Federal Regulations
Sodium azide (26628-22-8)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on the United States SARA Section 302
Listed on United States SARA Section 313

<table>
<thead>
<tr>
<th>SARA Section 302 Threshold Planning Quantity (TPQ)</th>
<th>500 (This material is a reactive solid. The TPQ does not default to 10000 pounds for non-powder, non-molten, non-solution form)</th>
</tr>
</thead>
</table>
| SARA Section 311/312 Hazard Classes | Immediate (acute) health hazard
Delayed (chronic) health hazard |
| SARA Section 313 - Emission Reporting | 1.0 % |

Direct Blue 53 (314-13-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. US State Regulations
Sodium azide (26628-22-8)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

15.3. Canadian Regulations
IFA Conjugate with Evans Blue
WHMIS Classification | Uncontrolled product according to WHMIS classification criteria

Sodium azide (26628-22-8)
Listed on the Canadian DSL (Domestic Substances List)
Listed on the Canadian IDL (Ingredient Disclosure List)

<table>
<thead>
<tr>
<th>IDL Concentration 1 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHMIS Classification</td>
</tr>
<tr>
<td>Class D Division 1 Subdivision A - Very toxic material causing immediate and serious toxic effects</td>
</tr>
</tbody>
</table>

Direct Blue 53 (314-13-6)
Listed on the Canadian DSL (Domestic Substances List)
Listed on the Canadian IDL (Ingredient Disclosure List)

<table>
<thead>
<tr>
<th>IDL Concentration 1 %</th>
</tr>
</thead>
</table>

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION
Revision Date : 06/11/2015
Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:
<table>
<thead>
<tr>
<th>Acute Tox. 1 (Dermal)</th>
<th>Acute toxicity (dermal) Category 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 2 (Oral)</td>
<td>Acute toxicity (oral) Category 2</td>
</tr>
<tr>
<td>Aquatic Acute 1</td>
<td>Hazardous to the aquatic environment - Acute Hazard Category 1</td>
</tr>
<tr>
<td>Carc. 1B</td>
<td>Carcinogenicity Category 1B</td>
</tr>
<tr>
<td>STOT RE 2</td>
<td>Specific target organ toxicity (repeated exposure) Category 2</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>H300</th>
<th>Fatal if swallowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>H310</td>
<td>Fatal in contact with skin</td>
</tr>
<tr>
<td>H350</td>
<td>May cause cancer</td>
</tr>
<tr>
<td>H373</td>
<td>May cause damage to organs through prolonged or repeated exposure</td>
</tr>
<tr>
<td>H400</td>
<td>Very toxic to aquatic life</td>
</tr>
</tbody>
</table>

**Party Responsible for the Preparation of This Document**

Zeus Scientific, Inc. 908-526-3744

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*