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**SAFETY DATA SHEET**

**HELENA LABORATORIES**  
**1530 Lindbergh Dr.**  
**Beaumont, TX 77707**  
**USA Toll Free 800-231-5663**

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DATE PREPARED: 2/2/2024  
REVISION: 3

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**1. IDENTIFICATION**

**Product number:** 3389

**Product identifier used on the label:** SPIFE IgG IEF – 10 Kit

**Other means of identification:**

<b>Component Name</b>	<b>Component Number</b>
552457, SPIFE IgG IEF Gel Kit	
IgG IEF Gel	552458
IgG IEF Anode Solution	552197
IgG IEF Cathode Solution	552198
IgG IEF Blocking Agent	552199
IgG IEF Acetate Buffer Concentrate	552200
552202, SPIFE IgG IEF Reagent Kit	
IgG IEF Chromogen	552201
IgG IEF Single Antibody	552214

**Recommended use of the chemical and restrictions in use:** For In-Vitro Diagnostic use.

**Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:**

Helena Laboratories  
1530 Lindbergh Dr.  
Beaumont, TX 77707  
Tel: (409) 842-3714  
USE Toll Free 800-231-5663

**Emergency phone number:**  
(409) 842-3714

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**2. HAZARD IDENTIFICATION****Classification of the chemical:**

Component Name	GHS Classification	Hazard Statement
IgG IEF Cathode Solution	Skin corrosion/ irritation (Category 1)	Corrosive
IgG IEF Anode Solution	Skin Irritation (Category 2)	Irritant
IgG IEF Chromogen	Carcinogenity (Category 1B)	May cause cancer

**NOTE: All other components present no significant physical or chemical hazard.**

**Label elements:**

**Signal word:** Danger, Warning

**Precautionary statements:**

**Ingestion:** Harmful if swallowed

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

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component Name	Chemical Name	CAS #	Concentration
IgG IEF Cathode Solution	Sodium Hydroxide	1310-73-2	≥2% and <5%
IgG IEF Anode Solution	Acetic Acid	64-19-7	<10%
IgG IEF Chromogen	3-Amino-9-ethylcarbazole	132-32-1	≥25%

**NOTE: All other components present no significant physical or chemical hazard.**

**4. FIRST AID MEASURES****Description of first aid measures:**

**Inhalation:** If breathed in, remove person to fresh air. If not breathing, give artificial respiration. Consult a physician.

**Skin contact:** Wash off with soap and plenty of water. Consult a physician.

**Eye contact:** Flush eyes with water as a precaution. Consult a physician.

**Ingestion:** Do not induce vomiting. Rinse mouth with water. Consult a physician.

## 5. FIREFIGHTING MEASURES

**Extinguishing media:** Water spray, dry chemical, carbon dioxide, or alcohol resistant foam.

**Special hazards arising from the substance or mixture:** Carbon dioxides, nitrogen oxides.

**Special protective equipment and precautions for firefighters:** Wear proper protective equipment and self-contained breathing apparatus for firefighting if necessary.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment, and emergency procedures:** Wear personal protective equipment.

**Methods and materials for containment and cleaning up:** Mop up powder spills with wetted paper tissue and liquid spills with absorbent material. Transfer in suitable container for disposal.

## 7. HANDLING AND STORAGE

**Precautions for safe handling:** Wear personal protective equipment; avoid contact with skin and eyes.

**Conditions for safe storage, including any incompatibilities:** Store all kit components as per specified instructions.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure limits (ACGIH TLV & OSHA PEL):**

Chemical Name	ACGIH TLV	OSHA PEL
Acetic Acid	10 ppm	10 ppm
Sodium Hydroxide	Not known	Not known
3-Amino-9-ethylcarbazole	Not known	Not known

**NOTE:** All other components present no significant physical or chemical hazard.

**Exposure controls:**

**Respiratory protection:** Not required.

**Skin protection:** Wear appropriate protective gloves and suitable protective clothing.

**Eye protection:** Wear appropriate safety glasses or goggles.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### IgG IEF Cathode Solution

**Appearance:** Clear colorless liquid

**Odor:** None

**Odor threshold:** No data available

**pH:** No data available

**Melting point/Freezing point:** No data available

**Initial boiling point and range:** No data available

**Flash point:** No data available

**Evaporation rate:** No data available

**Flammability (solid, gas):** No data available

**Upper/lower flammability or explosive limits:** No data available

**Vapor pressure:** No data available

**Relative density:** No data available

**Solubility in water:** Soluble

**Partition coefficient: n-octanol/water:** No data available

**Auto-ignition temperature:** No data available

**Decomposition temperature:** No data available

**Viscosity:** No data available

### IgG IEF Anode Solution

**Appearance:** Clear colorless liquid

**Odor:** Mild pungent

**Odor threshold:** No data available

**pH:** No data available

**Melting point/Freezing point:** No data available

**Initial boiling point and range:** No data available

**Flash point:** No data available

**Evaporation rate:** No data available

**Flammability (solid, gas):** No data available

**Upper/lower flammability or explosive limits:** No data available

**Vapor pressure:** No data available

**Relative density:** No data available

**Solubility in water:** Soluble

**Partition coefficient: n-octanol/water:** No data available

**Auto-ignition temperature:** No data available

**Decomposition temperature:** No data available

**Viscosity:** No data available

#### **IgG IEF Chromogen**

**Appearance:** Brown powder

**Odor:** None

**Odor threshold:** No data available

**pH:** No data available

**Melting point/Freezing point:** 98-100°C (208-212°F)

**Initial boiling point and range:** No data available

**Flash point:** No data available

**Evaporation rate:** No data available

**Flammability (solid, gas):** No data available

**Upper/lower flammability or explosive limits:** No data available

**Vapor pressure:** No data available

**Relative density:** No data available

**Solubility in water:** No data available

**Partition coefficient: n-octanol/water:** No data available

**Auto-ignition temperature:** No data available

**Decomposition temperature:** No data available

**Viscosity:** No data available

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## 10. STABILITY AND REACTIVITY

### IgG IEF Cathode Solution

**Reactivity:** No data available.

**Chemical stability:** Stable under normal condition.

**Possibility of hazard reaction:** Hazardous polymerization does not occur.

**Conditions to avoid:** Incompatible materials.

**Incompatible materials:** Oxidizing agents, acids, metals, reducing agents, alkalines.

**Hazard decomposition products:** No data available.

### IgG IEF Anode Solution

**Reactivity:** No data available.

**Chemical stability:** Stable under normal condition.

**Conditions to avoid:** Incompatible materials.

**Incompatible materials:** Oxidizing agents, bases, metals.

**Hazard decomposition products:** Carbon monoxide, carbon dioxide.

**Possibility of hazard reaction:** Hazardous polymerization does not occur.

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**IgG IEF Chromogen**

**Reactivity:** No data available.

**Chemical stability:** Stable under normal condition.

**Conditions to avoid:** No data available.

**Incompatible materials:** Oxidizing agents, acids.

**Hazard decomposition products:** No data available.

**Possibility of hazard reaction:** No data available.

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**11. TOXICOLOGICAL INFORMATION****IgG IEF Cathode Solution**

**LD 50 Oral:** No data available

**Inhalation:** Harmful if inhaled

**Ingestion:** Harmful if swallowed

**Skin:** May be harmful if absorbed through skin. Cause skin irritation

**Eye:** Cause eye irritation

**IgG IEF Anode Solution**

**Calculated ATE LD 50 Oral:** >5000 mg/kg

**Inhalation:** Harmful if inhaled

**Ingestion:** Harmful if swallowed

**Skin:** May be harmful if absorbed through skin. Cause skin irritation

**Eye:** Cause eye irritation

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**IgG IEF Chromogen**

**LD 50 Oral:** No data available

**Inhalation:** No data available

**Ingestion:** No data available

**Skin:** No data available

**Eye:** No data available

**Carcinogenicity:** No components of this product present at level greater than or equal 0.1% is identified as probable, possible or confirmed human carcinogens by ACGIH, IARC, OSHA or NTP.

**Other important toxicological hazards:** To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

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**12. ECOLOGICAL INFORMATION**

**Eco-toxicity:** No data available

**Persistence and degradability:** No data available

**Bio-accumulative potential:** No data available

**Mobility in soil:** No data available

**Other adverse effects:** No data available

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**13. DISPOSAL CONSIDERATION**

Observe all federal, state and local regulations.

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**14. TRANSPORT INFORMATION****SPIFE IgG IEF Gel Kit**

**DOT (US):** Regulated as Hazardous Material during transportation.

**SPIFE IgG IEF Reagent Kit**

**DOT (US):** Regulated as Hazardous Material during transportation.

**UN number:**



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**UN proper shipping name:**

**Transport hazard class:**

**Packing group:**

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## **15. REGULATORY INFORMATION**

**US State Right to Know Laws:**

**California Proposition 65:** This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

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## **16. OTHER INFORMATION**

**SDS Creation date:** 12/9/2016

**Revision #:** 3

### **Disclaimer**

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Helena Laboratories shall not be held liable for any damage resulting from handling or from contact with the above product.