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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: 2/1/2024

REVISION: 4

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**1. IDENTIFICATION****Product number:** 3334, 3534T**Product identifier used on the label:** QuickGel CK Vis Isoenzyme Kit**Other means of identification:**

<b>Component Name</b>	<b>Component Number</b>
552396, QuickGel CK Gel Kit	
QuickGel CK Gel	552019
Citric Acid Destain	551959
552028, SPIFE CK Reagent Kit	
SPIFE CK Reagent	552021
SPIFE CK Diluent	552024
SPIFE CK Activator	552025
SPIFE CK Chromogen	552026

**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
Citric Acid Destain (Powder)	Eye/Skin (Category 2)	Irritant
SPIFE CK Chromogen	Eye Irritation (Category 2A)	

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

**NOTE: Citric Acid Destain Solution is not hazardous (< 1%) when dissolved following instructions on label.**

**Label elements:**

**Signal word:** Danger

**Precautionary statements:**

**Skin:** May cause skin irritation

**Eye:** Causes serious eye irritation

**Inhalation:** Harmful if inhaled

**Ingestion:** Harmful if swallowed

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

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component Name	Chemical Name	CAS #	Concentration
Citric Acid Destain	Citric Acid	77-92-9	100%
SPIFE CK Chromogen	N,N-Dimethylformamide	68-12-2	>80%
	Tetranitro Blue Tetrazolium	1184-43-6	<10%

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

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

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

**Skin contact:** Immediately wash off with soap and plenty of water. If skin irritation occurs, get medical attention. Take off contaminated clothing.

**Eye contact:** Immediately flush eyes with plenty of water for at least 15 minutes. Consult a physician.

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

#### **SPIFE CK Chromogen**

**Inhalation:** 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:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**Ingestion:** If swallowed do not induce vomiting. Rinse mouth with water. Consult a physician.

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## **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.

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## **6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment, and emergency procedures:** Wear personal protective equipment. Should not be released into the environment.

**Methods and materials for containment and cleaning up:** Soak up with inert absorbent material and transfer to container for proper disposal.

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## **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.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits (AGGIH TLV & OSHA PEL):

Chemical Name	AGGIH TLV	OSHA PEL
Citric Acid	None listed	None listed
Dimethylformamide	10 ppm	10 ppm
Tetranitro Blue Tetrazolium	None listed	None listed

**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.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Citric Acid Destain (Powder)**

**Appearance:** White crystalline

**Odor:** None

**Odor threshold:** No data available

**pH:** 1.8 at 50 g/L

**Melting point/Freezing point:** 153-159°C

**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

### CK Chromogen

**Appearance:** Yellow to brown liquid

**Odor:** Rotten-egg like

**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

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## 10. STABILITY AND REACTIVITY

**Reactivity:** Not normally reactive

**Chemical stability:** Stable under normal condition

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

**Conditions to avoid:** Avoid contact with incompatible materials and heat.

**Incompatible materials:** Oxidizing agents, strong bases

**Hazard decomposition products:** Hazard decomposition products formed under fire conditions:  
Carbon oxides

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## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure:**

Citric Acid Destain (Powder) LD50 oral rat = 5400 mg/kg

**NOTE: Citric Acid Destain is not hazardous (<1%) when dissolved following instructions on label.**

**Potential health effects:**

**Inhalation:** May be harmful if inhaled

**Ingestion:** May be harmful if swallowed

**Skin:** May cause skin irritation

**Eye:** May cause eye irritation

**Dimethylformamide LD50 (oral rat) = 3040 mg/kg**

Irritating to eyes and skin.

**Carcinogenicity:** No components are listed as carcinogens by AGGIH, 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**

**DOT (US):**

**QuickGel CK Gel Kit** - Not regulated

**SPIFE CK Reagent Kit** – Regulated as Hazardous Material during transportation.

**UN number:**

**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:** 5/5/2015

**Revision #:** 4

**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.