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**SAFETY DATA SHEET**

**HELENA LABORATORIES**  
**1530 Lindbergh Dr. / P.O. Box 752**  
**Beaumont, TX 77704-0752**  
**USA Toll Free 800-231-5663**

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DATE PREPARED: 3/13/2018

REVISION: 3

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**1. IDENTIFICATION****Product number:** 3345, 3346**Product identifier used on the label:** SPIFE Alkaline Phosphatase – 20, 40 Kit**Other means of identification:**

| <b>Component Name</b>                               | <b>Component Number</b> |
|---|-------------------------|
| 552395, SPIFE Alkaline Phosphatase – 20, 40 Gel Kit |                         |
| SPIFE Alkaline Phosphatase Gel                      | 552601                  |
| Citric Acid Destain                                 | 551959                  |
| 552055, SPIFE Alkaline Phosphatase Reagent Kit      |                         |
| Alkaline Phosphatase Reagent                        | 551232                  |
| Alkaline Phosphatase Diluent                        | 551234                  |

**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. / P.O. Box 752  
Beaumont, TX 77704-0752  
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         |
| Alkaline Phosphatase Diluent | Eye/Skin (Category 2) | Irritant         |

**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:** Warning

**Precautionary statements:**

**Skin:** Cause skin irritation

**Eye:** Cause eye irritation

**Inhalation:** May be 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%          |
| Alkaline Phosphatase Diluent | 2-Amino-2-methyl-1-propanol | 124-68-5 | <20%          |

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

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

**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.

#### **Alkaline Phosphatase Diluent**

**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:** Immediately flush eyes with plenty of water for at least 15 minutes. 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 |
| 2-Amino-2-methyl-1-propanol | 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

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

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

**Decomposition temperature:** No data available

**Viscosity:** No data available

### **Alkaline Phosphatase Diluent**

**Appearance:** Clear, colorless liquid

**Odor:** None

**Odor threshold:** No data available

**pH:** 10.25-10.45

**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, acids.

**Hazard decomposition products:** Hazard decomposition products formed under fire conditions: Carbon oxides, Nitrogen 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.**

The calculated ATE value for Alkaline Phosphatase Diluent Oral LD 50 is >8000 mg/kg.

**Potential health effects:**

**Inhalation:** May be harmful if inhaled

**Ingestion:** May be harmful if swallowed

**Skin:** May cause skin irritation

**Eye:** Cause eye irritation

**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):** Not dangerous goods

**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 #:** 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.