
SAFETY DATA SHEET

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

DATE PREPARED: 5/17/2024
REVISION: 6

1. IDENTIFICATION

Product number: 3457

Product identifier used on the label: SPIFE IFE-9 Pentavalent Kit

Other means of identification:

Component Name	Component Number
552563, SPIFE IFE-9 Gel Kit	
SPIFE IFE-9 Gel	552537
Acid Violet Stain	551758
Citric Acid Destain	551959
Tris Buffered Saline	551715
552229, SPIFE IFE-9 Pentavalent Antisera Kit	
SPIFE IFE-9 Pentavalent Fixative	552232
SPIFE IFE-9 Pentavalent Antisera	552234

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

2. HAZARD IDENTIFICATION

Classification of the chemical:

Component Name	GHS Classification	Hazard Statement
552563, SPIFE IFE-9 Gel Kit		
SPIFE IFE-9 Gel	Not Classified	Harmful if swallowed
Citric Acid Destain (Powder)	Eye/Skin (Category 2)	Irritant
552229, SPIFE IFE-9 Pentavalent Antisera Kit		
SPIFE IFE-9 Pentavalent Fixative	Eye/Skin (Category 4)	Corrosive

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:

SPIFE IFE-9 Gel Kit: **Signal word:** Warning

SPIFE IFE-9 Pentavalent Antisera Kit: **Signal word:** Danger

Precautionary statements:

Skin: May cause skin irritation

Eye: May cause eye irritation

Inhalation: May be harmful if inhaled

Ingestion: May be harmful if swallowed

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	Chemical Name	CAS #	Concentration
SPIFE IFE-9 Gel	Sodium Barbital	144-02-5	1.3%
Citric Acid Destain	Citric Acid	77-92-9	< 1%
SPIFE IFE-9 Pentavalent Fixative	5-Sulfosalicylic Acid	5965-83-3	4%
	Trichloroacetic Acid	76-03-9	6.7%
	Guanidine Hydrochloride	50-01-1	1.7%

4. FIRST AID MEASURES

Description of first aid measures:

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.

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, sulfur.

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. Evacuate personnel to safe areas. Soak up with inert absorbent material and transfer to container for proper disposal.

Methods and materials for containment and cleaning up: Do not allow material to enter drains/surface water/ground water. Ventilate the area.

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 (AGGIH TLV & OSHA PEL):

Chemical Name	AGGIH TLV	OSHA PEL
Sodium Barbital	None listed	None listed
Citric Acid	None listed	None listed
5-Sulfosalicylic Acid	None listed	None listed
Trichloroacetic Acid	1 ppm	None listed
Guanidine Hydrochloride	None listed	None listed

Exposure controls:

Respiratory protection: Use NOISH approved respirators if necessary.

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

SPIFE IFE-9 Gel

Appearance: Solid (gel)

Odor: None

Odor threshold: No data available

pH: Not applicable

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

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

Tris Buffered Saline

Appearance: White crystalline powder

Odor: None

Odor threshold: No data available

pH: 8.2-8.8 (when dissolved following instructions on label)

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

SPIFE IFE-9 Pentavalent Fixative

Appearance: Liquid

Odor: None

Odor threshold: No data available

pH: < 2

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

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

11. TOXICOLOGICAL INFORMATION**The calculated ATE value:**

SPIFE IFE-9 Gel LD50 oral = 50000 mg/kg

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

SPIFE IFE-9 Pentavalent Fixative LD50 oral = 12987 mg/kg

See the following table for individual ingredient acute toxicity data:

Chemical Name	LD 50 (oral, rat)
Sodium Barbital	600 mg/kg
5-Sulfosalicylic Acid	2450 mg/kg
Trichloroacetic Acid	3320 mg/kg
Guanidine Hydrochloride	475 mg/kg

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**Carcinogenicity:** Trichloroacetic Acid is listed as carcinogens by AGGIH, IARC, OSHA.**Other important toxicological hazards:** To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

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

13. DISPOSAL CONSIDERATION

Observe all federal, state and local regulations.

14. TRANSPORT INFORMATION**DOT (US):**

SPIFE IFE-9 Gel Kit - Not regulated

SPIFE IFE-9 Pentavalent Antisera Kit- Regulated as Hazardous Material during transportation.

UN number:

UN proper shipping name:

Transport hazard class:

Packing group:

15. REGULATORY INFORMATION**US State Right to Know Laws:****California Proposition 65:**

SPIFE IFE-9 Gel: This product can expose you to Barbiturates, which is known to the State of California to cause developmental harm.

SPIFE IFE Pentavalent Protein Fixative: This product can expose you to Trichloroacetic Acid, which is known to the State of California to cause cancer.

For more information, go to www.p65warnings.ca.gov.

16. OTHER INFORMATION

SDS Creation date: 5/7/2014

Revision #: 6

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.