SAFETY DATA SHEET

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

DATE PREPARED: 8/28/2015 REVISION: 1

1. IDENTIFICATION

Product Number: 5292

Product identifier used on the label: Free and Total Protein S ELISA Kit

Other means of identification:

Component Name	Component Number
Phosphate Buffered Saline (PBS)	551694
Sample Diluent	551690
Protein S: Ag Microwells	551689
Protein S Conjugate	551692
Substrate Solution	551691
Stopping Solution	551693
Free Protein S Reagent	551695
ELISA Reference Plasma	551654

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

2. HAZARD IDENTIFICATION

Classification of the chemical:

Component Name	GHS Classification	Hazard Statement
Stopping Solution	Eye/Skin irritation (Category 2)	Irritant
Substrate Solution	Eye/Skin irritation (Category 3)	Irritant
ELISA Reference Plasma (Human)		Biohazard

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

Label elements:

Signal word: Warning

Precautionary statements:

Skin: May cause skin irritation.

Eye: May 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
Stopping Solution	Sulfuric Acid	7664-93-9	1.0%
Substrate Solution	3,3,5,5-	54827-17-7	<3%
	Tetramethylbenzidine		

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

4. FIRST AID MEASURES

Description of first aid measures:

- **Inhalation:** If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.
- **Skin contact:** Wash off with soap and plenty of water. If skin irritation occurs, get medical attention. Take off contaminated clothing.

SDS: 5292	Page 3 of 7
Eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes. Consult a physician.
Ingestion:	If swallowed rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES

Extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture: Slight fire hazard.

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. Collect spilled 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; do not inhale, avoid contact with skin and eyes.

Conditions for safe storage, including any incompatibilities: Keep containers tightly closed and store at 2-8°C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits (AGGIH TLV & OSHA PEL):

Chemical Name	AGGIH TLV	OSHA PEL
Sulfuric Acid	0.2 mg/m3	1 mg/m3
3,3,5,5-Tetramethylbenzidine	None listed	None listed

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

Exposure controls:

Respiratory protection: Not required.

SDS: 5292	Page 4 of 7
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

Reagents are aqueous solutions and are color-coded by the addition of non-hazardous coloring agents to ease identification.

Phosphate Buffered Saline (PBS)

Appearance: Clear liquid

Odor: Not identified

Sample Diluent

Appearance: Blue liquid

Odor: Not identified

Protein S Conjugate

Appearance: Red liquid

Odor: Not identified

Substrate Solution

Appearance: Clear liquid

Odor: Not identified

Stopping Solution

Appearance: Clear liquid

Odor: Not identified

Free Protein S Reagent

Appearance: Clear liquid

Odor: Not identified

ELISA Reference Plasma

Appearance: Yellowish solid

Odor: Not identified

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: None reported

Incompatible materials: None reported

Hazard decomposition products: Nature of decomposition products not known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure: The calculated ATE values:

Stopping Solution LD50 Oral >100000 mg/kg

See the following table for individual ingredient acute toxicity data

Chemical Name	LD 50 (oral, rat)
Sulfuric Acid	2140 mg/kg

Carcinogenicity: Not listed as carcinogens by AGGIH, IARC, OSHA or NTP.

Potential health effects:

Inhalation: May be harmful if inhaled.

Ingestion: Harmful if swallowed.

Skin: May cause skin irritation

Eye: May cause eye irritation

Potential Chronic Health Effects: No information available.

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): Not regulated

UN number:

UN proper shipping name:

Transport hazard class:

Packing group:

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.

16. OTHER INFORMATION

SDS Creation date: 8/28/2015

Revision #: 1

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.