

SAFETY DATA SHEET



Agilent High Sensitivity Protein 250 Reagents

Section 1. Identification

1.1 Product identifier

Product name : Agilent High Sensitivity Protein 250 Reagents
Part no. (chemical kit) : 5067-1576
Part no. : High Sens Protein Reagents G2938-85000
 Protein 250 Gel Matrix Not available.
 Protein 250 Destain Solution Not available.
 Protein 250 Sample Buffer Not available.
Validation date : 5/20/2024

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Analytical reagent.
 Research and Development
 Protein 250 Gel Matrix 1 x 0.6 ml
 Protein 250 Destain Solution 1 x 0.150 ml
 Protein 250 Sample Buffer 3 x 0.1 ml

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer : Agilent Technologies, Inc.
 5301 Stevens Creek Blvd
 Santa Clara, CA 95051, USA
 800-227-9770

1.4 Emergency telephone number

In case of emergency : CHEMTREC®: 1-800-424-9300

Section 2. Hazards identification

2.1 Classification of the substance or mixture

OSHA/HCS status : Protein 250 Gel Matrix	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Protein 250 Destain Solution	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Protein 250 Sample Buffer	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture

Not classified.

Section 2. Hazards identification

<p>Protein 250 Gel Matrix</p> <p>Protein 250 Destain Solution</p>	<p>Percentage of the mixture consisting of ingredient (s) of unknown hazards to the aquatic environment: 4.5%</p> <p>Percentage of the mixture consisting of ingredient (s) of unknown hazards to the aquatic environment: 4.5%</p>
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2.2 GHS label elements

Signal word	<p>Protein 250 Gel Matrix</p> <p>Protein 250 Destain Solution</p> <p>Protein 250 Sample Buffer</p>	<p>No signal word.</p> <p>No signal word.</p> <p>No signal word.</p>
Hazard statements	<p>Protein 250 Gel Matrix</p> <p>Protein 250 Destain Solution</p> <p>Protein 250 Sample Buffer</p>	<p>No known significant effects or critical hazards.</p> <p>No known significant effects or critical hazards.</p> <p>No known significant effects or critical hazards.</p>
Precautionary statements		
Prevention	<p>Protein 250 Gel Matrix</p> <p>Protein 250 Destain Solution</p> <p>Protein 250 Sample Buffer</p>	<p>Not applicable.</p> <p>Not applicable.</p> <p>Not applicable.</p>
Response	<p>Protein 250 Gel Matrix</p> <p>Protein 250 Destain Solution</p> <p>Protein 250 Sample Buffer</p>	<p>Not applicable.</p> <p>Not applicable.</p> <p>Not applicable.</p>
Storage	<p>Protein 250 Gel Matrix</p> <p>Protein 250 Destain Solution</p> <p>Protein 250 Sample Buffer</p>	<p>Not applicable.</p> <p>Not applicable.</p> <p>Not applicable.</p>
Disposal	<p>Protein 250 Gel Matrix</p> <p>Protein 250 Destain Solution</p> <p>Protein 250 Sample Buffer</p>	<p>Not applicable.</p> <p>Not applicable.</p> <p>Not applicable.</p>
Supplemental label elements	<p>Protein 250 Gel Matrix</p> <p>Protein 250 Destain Solution</p> <p>Protein 250 Sample Buffer</p>	<p>None known.</p> <p>None known.</p> <p>None known.</p>

2.3 Other hazards

Hazards not otherwise classified	<p>Protein 250 Gel Matrix</p> <p>Protein 250 Destain Solution</p> <p>Protein 250 Sample Buffer</p>	<p>None known.</p> <p>None known.</p> <p>None known.</p>
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Section 3. Composition/information on ingredients

Substance/mixture	<p>Protein 250 Gel Matrix</p> <p>Protein 250 Destain Solution</p> <p>Protein 250 Sample Buffer</p>	<p>Mixture</p> <p>Mixture</p> <p>Mixture</p>
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Ingredient name	%	CAS number
Protein 250 Gel Matrix		
Trometamol	≤5	77-86-1
Sodium dodecyl sulphate	≤2.4	151-21-3
Protein 250 Destain Solution		
Trometamol	≤5	77-86-1
Sodium dodecyl sulphate	≤2.4	151-21-3

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Section 3. Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

4.1 Description of necessary first aid measures

Eye contact	: Protein 250 Gel Matrix	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	Protein 250 Destain Solution	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	Protein 250 Sample Buffer	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	: Protein 250 Gel Matrix	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	Protein 250 Destain Solution	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	Protein 250 Sample Buffer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	: Protein 250 Gel Matrix	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Protein 250 Destain Solution	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Protein 250 Sample Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: Protein 250 Gel Matrix	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	Protein 250 Destain Solution	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	Protein 250 Sample Buffer	Wash out mouth with water. If material has been

Section 4. First aid measures

swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

4.2 Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	: Protein 250 Gel Matrix Protein 250 Destain Solution Protein 250 Sample Buffer	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Inhalation	: Protein 250 Gel Matrix Protein 250 Destain Solution Protein 250 Sample Buffer	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Skin contact	: Protein 250 Gel Matrix Protein 250 Destain Solution Protein 250 Sample Buffer	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Ingestion	: Protein 250 Gel Matrix Protein 250 Destain Solution Protein 250 Sample Buffer	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	: Protein 250 Gel Matrix Protein 250 Destain Solution Protein 250 Sample Buffer	No specific data. No specific data. No specific data.
Inhalation	: Protein 250 Gel Matrix Protein 250 Destain Solution Protein 250 Sample Buffer	No specific data. No specific data. No specific data.
Skin contact	: Protein 250 Gel Matrix Protein 250 Destain Solution Protein 250 Sample Buffer	No specific data. No specific data. No specific data.
Ingestion	: Protein 250 Gel Matrix Protein 250 Destain Solution Protein 250 Sample Buffer	No specific data. No specific data. No specific data.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	: Protein 250 Gel Matrix Protein 250 Destain Solution Protein 250 Sample Buffer	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: Protein 250 Gel Matrix Protein 250 Destain Solution Protein 250 Sample Buffer	No specific treatment. No specific treatment. No specific treatment.
Protection of first-aiders	: Protein 250 Gel Matrix Protein 250 Destain Solution Protein 250 Sample Buffer	No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training.

Section 4. First aid measures

See toxicological information (Section 11)

Section 5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	: Protein 250 Gel Matrix	Use an extinguishing agent suitable for the surrounding fire.
	Protein 250 Destain Solution	Use an extinguishing agent suitable for the surrounding fire.
	Protein 250 Sample Buffer	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: Protein 250 Gel Matrix	None known.
	Protein 250 Destain Solution	None known.
	Protein 250 Sample Buffer	None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	: Protein 250 Gel Matrix	In a fire or if heated, a pressure increase will occur and the container may burst.
	Protein 250 Destain Solution	In a fire or if heated, a pressure increase will occur and the container may burst.
	Protein 250 Sample Buffer	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: Protein 250 Gel Matrix	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides metal oxide/oxides
	Protein 250 Destain Solution	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides metal oxide/oxides
	Protein 250 Sample Buffer	No specific data.

5.3 Advice for firefighters

Special protective actions for fire-fighters	: Protein 250 Gel Matrix	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	Protein 250 Destain Solution	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	Protein 250 Sample Buffer	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Section 5. Fire-fighting measures

Special protective equipment for fire-fighters	: Protein 250 Gel Matrix	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Protein 250 Destain Solution	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Protein 250 Sample Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: Protein 250 Gel Matrix	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
	Protein 250 Destain Solution	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
	Protein 250 Sample Buffer	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
For emergency responders	: Protein 250 Gel Matrix	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Protein 250 Destain Solution	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Protein 250 Sample Buffer	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Protein 250 Gel Matrix	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Protein 250 Destain Solution	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Protein 250 Sample Buffer	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 6. Accidental release measures

Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Protein 250 Gel Matrix

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Protein 250 Destain Solution

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Protein 250 Sample Buffer

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

7.1 Precautions for safe handling

Protective measures : Protein 250 Gel Matrix

Put on appropriate personal protective equipment (see Section 8).

Protein 250 Destain Solution

Put on appropriate personal protective equipment (see Section 8).

Protein 250 Sample Buffer

Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene : Protein 250 Gel Matrix

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Protein 250 Destain Solution

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Protein 250 Sample Buffer

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Section 7. Handling and storage

7.2 Conditions for safe storage, including any incompatibilities

: Protein 250 Gel Matrix

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Protein 250 Destain Solution

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Protein 250 Sample Buffer

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations

: Protein 250 Gel Matrix
Protein 250 Destain Solution
Protein 250 Sample Buffer

Industrial applications, Professional applications.
Industrial applications, Professional applications.
Industrial applications, Professional applications.

Industrial sector specific solutions

: Protein 250 Gel Matrix
Protein 250 Destain Solution
Protein 250 Sample Buffer

Not available.
Not available.
Not available.

Section 8. Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Protein 250 Gel Matrix Trometamol Sodium dodecyl sulphate	None. None.
Protein 250 Destain Solution Trometamol Sodium dodecyl sulphate	None. None.

Biological exposure indices

No exposure indices known.

Section 8. Exposure controls/personal protection

8.2 Exposure controls

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

- | | | |
|-----------------------|--------------------------------|----------------|
| Physical state | : Protein 250 Gel Matrix | Liquid. |
| | : Protein 250 Destain Solution | Liquid. |
| | : Protein 250 Sample Buffer | Liquid. |
| Color | : Protein 250 Gel Matrix | Not available. |
| | : Protein 250 Destain Solution | Not available. |
| | : Protein 250 Sample Buffer | Not available. |
| Odor | : Protein 250 Gel Matrix | Not available. |
| | : Protein 250 Destain Solution | Not available. |
| | : Protein 250 Sample Buffer | Not available. |
| Odor threshold | : Protein 250 Gel Matrix | Not available. |
| | : Protein 250 Destain Solution | Not available. |
| | : Protein 250 Sample Buffer | Not available. |
| pH | : Protein 250 Gel Matrix | Not available. |
| | : Protein 250 Destain Solution | Not available. |
| | : Protein 250 Sample Buffer | Not available. |

Section 9. Physical and chemical properties and safety characteristics

- Melting point/freezing point** : Protein 250 Gel Matrix Not available.
 Protein 250 Destain Solution Not available.
 Protein 250 Sample Buffer 0°C (32°F)
- Boiling point, initial boiling point, and boiling range** : Protein 250 Gel Matrix Not available.
 Protein 250 Destain Solution Not available.
 Protein 250 Sample Buffer 100°C (212°F)

Flash point :

Ingredient name	Closed cup			Open cup		
	°C	°F	Method	°C	°F	Method
Protein 250 Gel Matrix						
Sodium dodecyl sulphate	170	338	-	-	-	-
Protein 250 Destain Solution						
Sodium dodecyl sulphate	170	338	-	-	-	-

- Evaporation rate** : Protein 250 Gel Matrix Not available.
 Protein 250 Destain Solution Not available.
 Protein 250 Sample Buffer Not available.

- Flammability** : Protein 250 Gel Matrix Not applicable.
 Protein 250 Destain Solution Not applicable.
 Protein 250 Sample Buffer Not applicable.

- Lower and upper explosion limit/flammability limit** : Protein 250 Gel Matrix Not available.
 Protein 250 Destain Solution Not available.
 Protein 250 Sample Buffer Not available.

Vapor pressure :

Ingredient name	Vapor Pressure at 20°C			Vapor pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
Protein 250 Gel Matrix						
water	17.5	2.3	-	92.258	12.3	-
Protein 250 Destain Solution						
water	17.5	2.3	-	92.258	12.3	-
Sodium dodecyl sulphate	≤0.0013501	≤0.00018	-	-	-	-
Protein 250 Sample Buffer						
water	17.5	2.3	-	92.258	12.3	-

- Relative vapor density** : Protein 250 Gel Matrix Not available.
 Protein 250 Destain Solution Not available.
 Protein 250 Sample Buffer Not available.

Section 9. Physical and chemical properties and safety characteristics

Relative density : Protein 250 Gel Matrix Not available.
 Protein 250 Destain Solution Not available.
 Protein 250 Sample Buffer Not available.

Media	Result
Protein 250 Gel Matrix water	Soluble
Protein 250 Destain Solution water	Soluble
Protein 250 Sample Buffer water	Soluble

Partition coefficient: n-octanol/water : Protein 250 Gel Matrix Not applicable.
 Protein 250 Destain Solution Not applicable.
 Protein 250 Sample Buffer Not applicable.

Ingredient name	°C	°F	Method
Protein 250 Gel Matrix			
Sodium dodecyl sulphate	310.5	590.9	VDI 2263
Protein 250 Destain Solution			
Sodium dodecyl sulphate	310.5	590.9	VDI 2263

Decomposition temperature : Protein 250 Gel Matrix Not available.
 Protein 250 Destain Solution Not available.
 Protein 250 Sample Buffer Not available.

Viscosity : Protein 250 Gel Matrix Not available.
 Protein 250 Destain Solution Not available.
 Protein 250 Sample Buffer Not available.

Particle characteristics

Median particle size : Protein 250 Gel Matrix Not applicable.
 Protein 250 Destain Solution Not applicable.
 Protein 250 Sample Buffer Not applicable.

Section 10. Stability and reactivity

10.1 Reactivity : Protein 250 Gel Matrix No specific test data related to reactivity available for this product or its ingredients.
 Protein 250 Destain Solution No specific test data related to reactivity available for this product or its ingredients.
 Protein 250 Sample Buffer No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : Protein 250 Gel Matrix The product is stable.
 Protein 250 Destain Solution The product is stable.
 Protein 250 Sample Buffer The product is stable.

10.3 Possibility of hazardous reactions : Protein 250 Gel Matrix Under normal conditions of storage and use, hazardous reactions will not occur.
 Protein 250 Destain Solution Under normal conditions of storage and use, hazardous reactions will not occur.
 Protein 250 Sample Buffer Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : Protein 250 Gel Matrix No specific data.
 Protein 250 Destain Solution No specific data.
 Protein 250 Sample Buffer No specific data.

Section 10. Stability and reactivity

10.5 Incompatible materials	: Protein 250 Gel Matrix Protein 250 Destain Solution Protein 250 Sample Buffer	May react or be incompatible with oxidizing materials. May react or be incompatible with oxidizing materials. May react or be incompatible with oxidizing materials.
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10.6 Hazardous decomposition products	: Protein 250 Gel Matrix Protein 250 Destain Solution Protein 250 Sample Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.
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Section 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Protein 250 Gel Matrix Trometamol Sodium dodecyl sulphate	LD50 Dermal	Rat	>5000 mg/kg	-
	LD50 Oral	Rat	1288 mg/kg	-
Protein 250 Destain Solution Trometamol Sodium dodecyl sulphate	LD50 Dermal	Rat	>5000 mg/kg	-
	LD50 Oral	Rat	1288 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Protein 250 Gel Matrix Trometamol Sodium dodecyl sulphate	Skin - Moderate irritant	Rabbit	-	25 %	-
	Skin - Severe irritant	Rabbit	-	500 mg	-
	Eyes - Mild irritant	Rabbit	-	250 ug	-
	Eyes - Moderate irritant	Rabbit	-	10 mg	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Skin - Mild irritant	Guinea pig	-	24 hours 25 mg	-
	Skin - Mild irritant	Guinea pig	-	336 hours 25250 ppm	-
	Skin - Mild irritant	Human	-	48 hours 5 %	-
	Skin - Mild irritant	Rabbit	-	24 hours 50 mg	-
	Skin - Moderate irritant	Mouse	-	24 hours 25 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 25 mg	-
	Skin - Severe irritant	Guinea pig	-	48 hours 25250 ppm	-
	Skin - Severe irritant	Guinea pig	-	72 hours 25250 ppm	-
	Skin - Severe irritant	Human	-	24 hours 10 %	-

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Protein 250 Destain Solution Trometamol Sodium dodecyl sulphate	Skin - Severe irritant	Rabbit	-	24 hours 2.5 %	-
	Skin - Moderate irritant	Rabbit	-	25 %	-
	Skin - Severe irritant	Rabbit	-	500 mg	-
	Eyes - Mild irritant	Rabbit	-	250 ug	-
	Eyes - Moderate irritant	Rabbit	-	10 mg	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Skin - Mild irritant	Guinea pig	-	24 hours 25 mg	-
	Skin - Mild irritant	Guinea pig	-	336 hours 25250 ppm	-
	Skin - Mild irritant	Human	-	48 hours 5 %	-
	Skin - Mild irritant	Rabbit	-	24 hours 50 mg	-
	Skin - Moderate irritant	Mouse	-	24 hours 25 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 25 mg	-
	Skin - Severe irritant	Guinea pig	-	48 hours 25250 ppm	-
	Skin - Severe irritant	Guinea pig	-	72 hours 25250 ppm	-
Skin - Severe irritant	Human	-	24 hours 10 %	-	
Skin - Severe irritant	Rabbit	-	24 hours 2.5 %	-	

Sensitization

Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Protein 250 Gel Matrix Trometamol	Category 3	-	Respiratory tract irritation
Sodium dodecyl sulphate	Category 3	-	Respiratory tract irritation
Protein 250 Destain Solution Trometamol	Category 3	-	Respiratory tract irritation
Sodium dodecyl sulphate	Category 3	-	Respiratory tract irritation

Section 11. Toxicological information

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure

: Protein 250 Gel Matrix
Protein 250 Destain Solution
Protein 250 Sample Buffer

Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Not available.

Potential acute health effects

Eye contact

: Protein 250 Gel Matrix
Protein 250 Destain Solution
Protein 250 Sample Buffer

No known significant effects or critical hazards.
No known significant effects or critical hazards.
No known significant effects or critical hazards.

Inhalation

: Protein 250 Gel Matrix
Protein 250 Destain Solution
Protein 250 Sample Buffer

No known significant effects or critical hazards.
No known significant effects or critical hazards.
No known significant effects or critical hazards.

Skin contact

: Protein 250 Gel Matrix
Protein 250 Destain Solution
Protein 250 Sample Buffer

No known significant effects or critical hazards.
No known significant effects or critical hazards.
No known significant effects or critical hazards.

Ingestion

: Protein 250 Gel Matrix
Protein 250 Destain Solution
Protein 250 Sample Buffer

No known significant effects or critical hazards.
No known significant effects or critical hazards.
No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact

: Protein 250 Gel Matrix
Protein 250 Destain Solution
Protein 250 Sample Buffer

No specific data.
No specific data.
No specific data.

Inhalation

: Protein 250 Gel Matrix
Protein 250 Destain Solution
Protein 250 Sample Buffer

No specific data.
No specific data.
No specific data.

Skin contact

: Protein 250 Gel Matrix
Protein 250 Destain Solution
Protein 250 Sample Buffer

No specific data.
No specific data.
No specific data.

Ingestion

: Protein 250 Gel Matrix
Protein 250 Destain Solution
Protein 250 Sample Buffer

No specific data.
No specific data.
No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General : Protein 250 Gel Matrix
Protein 250 Destain Solution
Protein 250 Sample Buffer

No known significant effects or critical hazards.
No known significant effects or critical hazards.
No known significant effects or critical hazards.

Section 11. Toxicological information

Carcinogenicity	: Protein 250 Gel Matrix Protein 250 Destain Solution Protein 250 Sample Buffer	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Mutagenicity	: Protein 250 Gel Matrix Protein 250 Destain Solution Protein 250 Sample Buffer	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Reproductive toxicity	: Protein 250 Gel Matrix Protein 250 Destain Solution Protein 250 Sample Buffer	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Protein 250 Gel Matrix Protein 250 Gel Matrix Sodium dodecyl sulphate	128805.2 1288	N/A N/A	N/A N/A	N/A N/A	132.9 1.5
Protein 250 Destain Solution Protein 250 Destain Solution Sodium dodecyl sulphate	128800.1 1288	N/A N/A	N/A N/A	N/A N/A	150.0 1.5

Other information	: Protein 250 Gel Matrix	Adverse symptoms may include the following: Repeated exposure may cause skin dryness or cracking.
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Section 12. Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Protein 250 Gel Matrix Trometamol Sodium dodecyl sulphate	Acute EC50 >980 mg/l Fresh water	Daphnia	48 hours
	Acute NOEC 520 mg/l Fresh water	Daphnia	48 hours
	Acute EC50 1200 µg/l Marine water	Algae - <i>Skeletonema costatum</i>	96 hours
	Acute LC50 900 µg/l Marine water	Crustaceans - <i>Artemia salina</i> - Adult	48 hours
	Acute LC50 1400 µg/l Fresh water	Daphnia - <i>Daphnia pulex</i> - Neonate	48 hours
	Acute LC50 590 µg/l Fresh water	Fish - <i>Cirrhinus mrigala</i> - Larvae	96 hours
	Chronic NOEC 1.25 mg/l Marine water	Algae - <i>Ulva fasciata</i> - Zoea	96 hours
	Chronic NOEC 1 mg/l Fresh water	Crustaceans - <i>Pseudosida ramosa</i> - Neonate	21 days
	Chronic NOEC 3.2 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	21 days
	Chronic NOEC 0.8 mg/l Fresh water	Fish - <i>Gambusia holbrooki</i>	28 days
Protein 250 Destain Solution Trometamol Sodium dodecyl sulphate	Acute EC50 >980 mg/l Fresh water	Daphnia	48 hours
	Acute NOEC 520 mg/l Fresh water	Daphnia	48 hours
	Acute EC50 1200 µg/l Marine water	Algae - <i>Skeletonema costatum</i>	96 hours
	Acute LC50 900 µg/l Marine water	Crustaceans - <i>Artemia salina</i> - Adult	48 hours

Section 12. Ecological information

	Acute LC50 1400 µg/l Fresh water	Daphnia - <i>Daphnia pulex</i> - Neonate	48 hours
	Acute LC50 590 µg/l Fresh water	Fish - <i>Cirrhinus mrigala</i> - Larvae	96 hours
	Chronic NOEC 1.25 mg/l Marine water	Algae - <i>Ulva fasciata</i> - Zoea	96 hours
	Chronic NOEC 1 mg/l Fresh water	Crustaceans - <i>Pseudosida ramosa</i> - Neonate	21 days
	Chronic NOEC 3.2 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	21 days
	Chronic NOEC 0.8 mg/l Fresh water	Fish - <i>Gambusia holbrooki</i>	28 days

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Protein 250 Gel Matrix Trometamol	OECD 301F Ready Biodegradability - Manometric Respirometry Test	97.1 % - Readily - 28 days	30 mg/l	-
Sodium dodecyl sulphate	OECD 301B Ready Biodegradability - CO ₂ Evolution Test	95 % - Readily - 28 days	20 mg/l	-
Protein 250 Destain Solution Trometamol	OECD 301F Ready Biodegradability - Manometric Respirometry Test	97.1 % - Readily - 28 days	30 mg/l	-
Sodium dodecyl sulphate	OECD 301B Ready Biodegradability - CO ₂ Evolution Test	95 % - Readily - 28 days	20 mg/l	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Protein 250 Gel Matrix Trometamol	-	-	Readily
Sodium dodecyl sulphate	-	-	Readily
Protein 250 Destain Solution Trometamol	-	-	Readily
Sodium dodecyl sulphate	-	-	Readily

12.3 Bioaccumulative potential

Section 12. Ecological information

Product/ingredient name	LogP _{ow}	BCF	Potential
Protein 250 Gel Matrix			
Trometamol	-2.31	-	Low
Sodium dodecyl sulphate	-2.03	-	Low
Protein 250 Destain Solution			
Trometamol	-2.31	-	Low
Sodium dodecyl sulphate	-2.03	-	Low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

12.5 Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

13.1 Waste treatment methods

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Section 14. Transport information

DOT / TDG / Mexico / IMDG / IATA : Not regulated.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: Not determined

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Protein 250 Gel Matrix Not applicable.
 Protein 250 Destain Solution Not applicable.
 Protein 250 Sample Buffer Not applicable.

Composition/information on ingredients

Name	%	Classification
Protein 250 Gel Matrix		
Methylurea	≤5	COMBUSTIBLE DUSTS
Trometamol	≤5	COMBUSTIBLE DUSTS SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
Sodium dodecyl sulphate	≤2.4	FLAMMABLE SOLIDS - Category 2 COMBUSTIBLE DUSTS ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
Protein 250 Destain Solution		
Trometamol	≤5	COMBUSTIBLE DUSTS SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
Sodium dodecyl sulphate	≤2.4	FLAMMABLE SOLIDS - Category 2 COMBUSTIBLE DUSTS ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

Section 15. Regulatory information

New Jersey : None of the components are listed.

Pennsylvania : None of the components are listed.

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : Not determined.

Canada : Not determined.

China : Not determined.

Japan : **Japan inventory (CSCL):** Not determined.
Japan inventory (ISHL): Not determined.

New Zealand : Not determined.

Philippines : Not determined.

Republic of Korea : Not determined.

Taiwan : Not determined.

Thailand : Not determined.

Turkey : Not determined.

United States : Not determined.

Viet Nam : Not determined.

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
Not classified.	

History

Date of issue/Date of revision : 05/20/2024

Date of previous issue : 09/03/2020

Version : 8

Section 16. Other information

Key to abbreviations

- : ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- N/A = Not available
- UN = United Nations

✔ Indicates information that has changed from previously issued version.

Notice to reader

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