# SAFETY DATA SHEET



### Agilent High Sensitivity Protein 250 Reagents

### **Section 1. Identification**

Product identifier : Rgilent High Sensitivity Protein 250 Reagents

Part no. (chemical kit) : 5067-1576

Part no. : Figh Sens Protein Reagents G2938-85000

Protein 250 Gel Matrix

Protein 250 Destain Solution

Protein 250 Sample Buffer

Not available.

Not available.

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

Identified uses : Analytical reagent.

Research and Development

Protein 250 Gel Matrix1 x 0.6 mlProtein 250 Destain Solution1 x 0.150 mlProtein 250 Sample Buffer3 x 0.1 ml

Supplier/Manufacturer : Agilent Technologies Australia Pty Ltd

679 Springvale Road

Mulgrave

Victoria 3170, Australia

1800 802 402

Emergency telephone number (with hours of operation)

: CHEMTREC®: +(61)-290372994

# Section 2. Hazard(s) identification

#### Classification of the substance or mixture

Protein 250 Gel Matrix

H319 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A

**Protein 250 Destain Solution** 

H319 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A

Protein 250 Gel Matrix Percentage of the mixture consisting of ingredient(s)

of unknown hazards to the aquatic environment: 4.5%

Protein 250 Destain Solution Percentage of the mixture consisting of ingredient(s)

of unknown hazards to the aquatic environment: 4.5%

**GHS label elements** 

Hazard pictograms : Protein 250 Gel Matrix



Protein 250 Destain Solution



Signal word : Protein 250 Gel Matrix

Protein 250 Destain Solution
Protein 250 Sample Buffer

WARNING WARNING No signal word.

Date of issue/Date of revision : 20/05/2024 Date of previous issue : 03/09/2020 Version : 8 1/18

gilent High Sensitivity Protein 250 Reagents

**Hazard statements** 

### Section 2. Hazard(s) identification

		Protein 250 Destain Solution Protein 250 Sample Buffer	H319 - Causes serious eye irritation. No known significant effects or critical hazards.
Precautionary statements			
Prevention	:	Protein 250 Gel Matrix Protein 250 Destain Solution Protein 250 Sample Buffer	P280 - Wear eye or face protection. P280 - Wear eye or face protection. Not applicable.
Response	:	Protein 250 Gel Matrix	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
		Protein 250 Destain Solution	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.

Not applicable.

Not applicable.

H319 - Causes serious eye irritation.

Protein 250 Destain Solution Not applicable.
Protein 250 Sample Buffer Not applicable.

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

: Protein 250 Gel Matrix

Protein 250 Sample Buffer

: Protein 250 Gel Matrix

Supplemental label elements

**Storage** 

Additional warning : Frotein 250 Gel Matrix Not applicable.

Protein 250 Destain Solution Not applicable.

Protein 250 Sample Buffer Not applicable.

Other hazards which do not result in classification : Frotein 250 Gel Matrix Protein 250 Destain Solution

Protein 250 Gel Matrix

Protein 250 Destain Solution

Protein 250 Sample Buffer

None known.

None known.

### Section 3. Composition and ingredient information

Substance/mixture : Protein 250 Gel Matrix Mixture
Protein 250 Destain Solution Mixture
Protein 250 Sample Buffer Mixture

#### **CAS** number/other identifiers

Ingredient name	% (w/w)	CAS number
Protein 250 Gel Matrix		
Sodium dodecyl sulphate	≤2.4	151-21-3
Protein 250 Destain Solution		
Sodium dodecyl sulphate	≤2.4	151-21-3

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.

The total concentration of ingredients in this product, reported or not in this section, is 100%.

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

Date of issue/Date of revision : 20/05/2024 Date of previous issue : 03/09/2020 Version : 8 2/18

### Section 4. First aid measures

#### **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. Continue to rinse for at least 10 minutes. Get medical attention. Immediately flush eyes with plenty of water,

Protein 250 Destain Solution

occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

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. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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. Wash clothing before reuse. Clean shoes thoroughly before reuse. Flush contaminated skin with plenty of water.

Protein 250 Destain Solution

Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Protein 250 Sample Buffer

Flush contaminated skin with plenty of water.
Remove contaminated clothing and shoes. Get

medical attention if symptoms occur.

Date of issue/Date of revision : 20/05/2024 Date of previous issue : 03/09/2020 Version : 8 3/18

### Section 4. First aid measures

Ingestion

: Frotein 250 Gel Matrix

Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protein 250 Destain Solution

Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protein 250 Sample Buffer

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.

### Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Frotein 250 Gel Matrix Causes serious eye irritation.

Protein 250 Destain Solution Causes serious eye irritation.

Protein 250 Sample Buffer No known significant effects or critical hazards.

Inhalation : Protein 250 Gel Matrix No known significant effects or critical hazards.

Protein 250 Ger Matrix

Protein 250 Destain Solution
Protein 250 Sample Buffer

No known significant effects or critical hazards.

No known significant effects or critical hazards.

Skin contact : Protein 250 Gel Matrix No known significant effects or critical hazards. Protein 250 Destain Solution No known significant effects or critical hazards.

Protein 250 Sample Buffer No known significant effects or critical hazards.

Protein 250 Gel Matrix No known significant effects or critical hazards.

Protein 250 Destain Solution No known significant effects or critical hazards.

Protein 250 Sample Buffer No known significant effects or critical hazards.

Over-exposure signs/symptoms

Ingestion

**Eye contact**: Protein 250 Gel Matrix Adverse symptoms may include the following:

pain or irritation watering

redness

Protein 250 Destain Solution Adverse symptoms may include the following:

pain or irritation

watering redness

Protein 250 Sample Buffer No specific data.

Date of issue/Date of revision : 20/05/2024 Date of previous issue : 03/09/2020 Version : 8 4/18

### Section 4. First aid measures

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.

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

Notes to physician : Protein 250 Gel Matrix 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 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 Treat symptomatically. Contact poison treatment

specialist immediately if large quantities have been

ingested or inhaled.

Specific treatments : Protein 250 Gel Matrix No specific treatment.

Protein 250 Destain Solution No specific treatment. Protein 250 Sample Buffer No specific treatment.

Protection of first-aiders : Protein 250 Gel Matrix No action shall be taken involving any personal risk

or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth

resuscitation.

Protein 250 Destain Solution No action shall be taken involving any personal risk

or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth

resuscitation.

Protein 250 Sample Buffer No action shall be taken involving any personal risk

or without suitable training.

See toxicological information (Section 11)

### Section 5. Firefighting measures

### **Extinguishing media**

**Suitable extinguishing**: Frotein 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 : Frotein 250 Gel Matrix

Protein 250 Gel Matrix

Protein 250 Destain Solution

Protein 250 Sample Buffer

None known.

None known.

media

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.

Date of issue/Date of revision : 20/05/2024 Date of previous issue : 03/09/2020 Version : 8 5/18

gilent High Sensitivity Protein 250 Reagents

### Section 5. Firefighting measures

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 pro-

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.

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.

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

#### 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 spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Protein 250 Destain Solution

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 spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on

appropriate personal protective equipment.

No action shall be taken involving any personal risk

or without suitable training. Evacuate surrounding

areas. Keep unnecessary and unprotected

Date of issue/Date of revision : 20/05/2024 Date of previous issue : 03/09/2020 Version : 8 6/18

**Environmental precautions** 

### Section 6. Accidental release measures

personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal

protective equipment.

Protein 250 Sample Buffer

spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". If specialised clothing is required to deal with the

Protein 250 Destain Solution If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on

spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on

spillage, take note of any information in Section suitable and unsuitable materials. See also the information in "For non-emergency personnel".

: Protein 250 Gel Matrix Avoid dispersal of spilt 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 spilt 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 spilt 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).

Methods and material 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

Precautions for safe handling

Date of issue/Date of revision : 20/05/2024 Date of previous issue : 03/09/2020 Version : 8 7/18

### Section 7. Handling and storage

: Protein 250 Gel Matrix

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container

Protein 250 Destain Solution

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

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.

Conditions for safe storage, : Protein 250 Gel Matrix including any incompatibilities

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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use. 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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for

Protein 250 Sample Buffer

: 03/09/2020 Date of previous issue Version: 8

incompatible materials before handling or use.

Store in accordance with local regulations. Store in

: 20/05/2024

Protein 250 Destain Solution

Date of issue/Date of revision

### Section 7. Handling and storage

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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### Section 8. Exposure controls and personal protection

#### **Control parameters**

Occupational exposure limits

None.

#### **Biological exposure indices**

No exposure indices known.

# Appropriate engineering controls

**Environmental exposure** controls

- : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- : 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.

Date of issue/Date of revision : 20/05/2024 Date of previous issue : 03/09/2020 Version : 8 9/18

### 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.

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: Protein 250 Gel Matrix **Physical state** Liquid.

> Protein 250 Destain Solution Liquid. Protein 250 Sample Buffer Liquid.

: Protein 250 Gel Matrix Colour Not available.

> Protein 250 Destain Solution Not available. Protein 250 Sample Buffer Not available.

Odour : Protein 250 Gel Matrix Not available. Protein 250 Destain Solution Not available.

Protein 250 Sample Buffer Not available. : Protein 250 Gel Matrix Not available.

**Odour threshold** Protein 250 Destain Solution Not available. Protein 250 Sample Buffer Not available.

Protein 250 Gel Matrix Not available. pH Protein 250 Destain Solution Not available.

Protein 250 Sample Buffer Not available. Melting point/freezing point : Protein 250 Gel Matrix Not available.

Protein 250 Destain Solution Not available. Protein 250 Sample Buffer 0°C (32°F) : Protein 250 Gel Matrix Not available.

Boiling point, initial boiling point, and boiling range

Protein 250 Sample Buffer

Protein 250 Destain Solution Not available. 100°C (212°F)

Flash point

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

Protein 250 Gel Matrix Not available. **Evaporation rate** 

> Protein 250 Destain Solution Not available. Protein 250 Sample Buffer Not available. Protein 250 Gel Matrix Not applicable. Protein 250 Destain Solution Not applicable.

**Flammability** Protein 250 Sample Buffer Not applicable. Not available. Protein 250 Gel Matrix

Lower and upper explosion limit/flammability limit

Protein 250 Destain Solution Not available. Protein 250 Sample Buffer Not available.

Vapour pressure

	Vapou	Vapour Pressure at 20°C			Vapour pressure at 50°C		
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method	

Date of issue/Date of revision : 20/05/2024 Date of previous issue : 03/09/2020 Version: 8 10/18

# Section 9. Physical and chemical properties and safety characteristics

Characteristics								
	Protein 250 Gel							
	Matrix							
	water	17.5	2.3	-		92.258	12.3	-
	Protein 250							
	<b>Destain Solution</b>							
	water	17.5	2.3	-		92.258	12.3	-
	Sodium dodecyl	≤0.0013501	≤0.00018	_		_	_	_
	sulphate							
	Protein 250							
	Sample Buffer							
	water	17.5	2.3	_		92.258	12.3	-
Relative vapour density :	Protein 250 Gel Matr		Not avail	able			1	1
	Protein 250 Destain S		Not availa					
	Protein 250 Sample I	Buffer	Not availa					
Relative density :	Protein 250 Gel Matr	ix	Not availa	able.				
•	Protein 250 Destain S	Solution	Not availa	able.				
	Protein 250 Sample I	Buffer	Not avail	able.				
Solubility(ies) :	Media			F	Result			
	Protein 250 Gel Mat	rix						
	water			S	oluble			
	Protein 250 Destain	Solution	1					
	water			S	oluble			
	Protein 250 Sample	Buffer						
	water				oluble			
Partition coefficient: n- :	Protein 250 Gel Matr		Not appli					
octanol/water	Protein 250 Destain S		Not appli					
Auto invition towards	Protein 250 Sample I	Sullei	Not appli	Cabi	1	1		
Auto-ignition temperature :	Ingredient name		°C		°F	M	ethod	
	Protein 250 Gel Ma	trix						
	Codium dodooyl ouls	hata	310.5		500.0	\/1	DI 2263	
	Sodium dodecyl sulp	пасе	310.5		590.9		JI 2203	
	Protein 250 Destair	n Solutio	n					
	0 - 40 4 4 4		240.5		500.0	/	21.0000	
	Sodium dodecyl sulp		310.5		590.9	VI	DI 2263	
<b>Decomposition temperature</b> :	Protein 250 Gel Matr		Not availa					
	Protein 250 Destain S		Not availa					
	Protein 250 Sample I		Not availa					
Viscosity :	Protein 250 Gel Matr		Not availa					
	Protein 250 Destain S Protein 250 Sample I		Not availa					
Partials obsesses visting	i roteiii 200 Sairipie i	וטווטכ	INUL AVAII	avie.	•			
Particle characteristics	Distain OFO O-LNA -	i.,	NI=4"					
Median particle size :	Protein 250 Gel Matr Protein 250 Destain 9		Not appli Not appli					
	Protein 250 Sample I		Not appli					
		-41101	. tot appli	JUDI	٠.			

Date of issue/Date of revision : 20/05/2024 Date of previous issue : 03/09/2020 Version : 8 11/18

### Section 10. Stability and reactivity

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.

**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.

Possibility of hazardous reactions

: Protein 250 Gel Matrix Under normal conditions of storage and use,

hazardous reactions will not occur.

hazardous reactions will not occur.

Protein 250 Sample Buffer Under normal conditions of storage and use,

hazardous reactions will not occur.

Conditions to avoid : Protein 250 Gel Matrix No specific data.

Protein 250 Destain Solution No specific data.

Protein 250 Destain Solution No specific data.

Protein 250 Sample Buffer No specific data.

Incompatible materials : Frotein 250 Gel Matrix May react or be incompatible with oxidising materials.

Protein 250 Destain Solution May react or be incompatible with oxidising materials. Protein 250 Sample Buffer May react or be incompatible with oxidising materials.

Hazardous decomposition : Protein 250 Gel Matrix Under normal conditions of storage and use,

hazardous decomposition products should not be

produced.

Protein 250 Destain Solution Under normal conditions of storage and use,

hazardous decomposition products should not be

produced.

Protein 250 Sample Buffer Under normal conditions of storage and use,

hazardous decomposition products should not be

produced.

### **Section 11. Toxicological information**

### Information on toxicological effects

#### **Acute toxicity**

products

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

#### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
Protein 250 Gel Matrix					
Sodium dodecyl sulphate	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	

Date of issue/Date of revision : 20/05/2024 Date of previous issue : 03/09/2020 Version : 8 12/18

# Section 11. Toxicological information

		1		,	
	Skin - Mild irritant	Human	-	48 hours 5 %	-
	Skin - Mild irritant	Rabbit	_	24 hours 50	_
				mg	
	Skin - Moderate irritant	Mouse	_	24 hours 25	_
	Citi. Wodorato imant			mg	
	Skin - Moderate irritant	Rabbit		24 hours 25	
	Skiii - Moderate ii itant	Ιλαυυιι	_		-
	01: 0 : 11 1			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	_
				%	
				/-	
Protein 250 Destain					
Solution		D 11.11		050	
Sodium dodecyl sulphate	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	_
	Cian milant	. abbit		mg	
	Skin - Moderate irritant	Mouse		24 hours 25	_
	OKIT - MOGETALE ITILATIL	IVIOUSE	_		_
	Skin - Moderate irritant	Rabbit		mg 24 hours 25	
	Skiii - Moderate Irritant	Lappir	-		_
				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	_
				%	ļ
Consideration					

#### **Sensitisation**

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)

Date of issue/Date of revision : 20/05/2024 Date of previous issue : 03/09/2020 Version : 8 13/18

gilent High Sensitivity Protein 250 Reagents

# **Section 11. Toxicological information**

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

#### Specific target organ toxicity (repeated exposure)

Not available.

#### **Aspiration hazard**

Not available.

Information on likely routes

of exposure

: Protein 250 Gel Matrix

Routes of entry anticipated: Oral, Dermal, Inhalation,

Eyes.

Protein 250 Destain Solution

Routes of entry anticipated: Oral, Dermal, Inhalation,

Eyes.

Protein 250 Sample Buffer

Not available.

Potential acute health effects

**Eye contact** 

Protein 250 Gel Matrix

Causes serious eye irritation.

Protein 250 Destain Solution Protein 250 Sample Buffer

Causes serious eye irritation. No known significant effects or critical hazards.

Inhalation : Protein 250 Gel Matrix

No known significant effects or critical hazards.

Protein 250 Destain Solution Protein 250 Sample Buffer

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

Adverse symptoms may include the following:

pain or irritation

watering

redness

Protein 250 Destain Solution

Adverse symptoms may include the following:

pain or irritation

watering redness

Protein 250 Sample Buffer

No specific data.

Inhalation

: Protein 250 Gel Matrix Protein 250 Destain Solution No specific data. No specific data.

**Skin contact** 

Protein 250 Sample Buffer : Protein 250 Gel Matrix Protein 250 Destain Solution No specific data. No specific data. No specific data.

Ingestion

Protein 250 Sample Buffer : Protein 250 Gel Matrix

No specific data. No specific data.

Protein 250 Destain Solution No specific data. Protein 250 Sample Buffer No specific data.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure **Short term exposure**

Date of issue/Date of revision : 20/05/2024 Date of previous issue : 03/09/2020 Version: 8 14/18

### **Section 11. Toxicological information**

Potential immediate

effects

: Not available.

Potential delayed effects

: Not available.

**Long term exposure** 

Carcinogenicity

Mutagenicity

**Potential immediate** 

•

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

General : P

: Protein 250 Gel Matrix

Protein 250 Destain Solution

Protein 250 Sample Buffer

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

: Protein 250 Gel Matrix

Protein 250 Destain Solution Protein 250 Sample Buffer

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.

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

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

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**

Reproductive toxicity

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Protein 250 Gel Matrix Protein 250 Gel Matrix Sodium dodecyl sulphate	128805.2	110004.4	N/A	N/A	N/A
	1288	1100	N/A	N/A	N/A
Protein 250 Destain Solution Protein 250 Destain Solution Sodium dodecyl sulphate	128800.1	110000.1	N/A	N/A	N/A
	1288	1100	N/A	N/A	N/A

Other information : Protein 250 Gel Matrix

Adverse symptoms may include the following: Repeated exposure may cause skin dryness or cracking.

### **Section 12. Ecological information**

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
Protein 250 Gel Matrix			
Sodium dodecyl sulphate	Acute EC50 1200 µg/l Marine water	Algae - Skeletonema costatum	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 - Cirrhinus mrigala - 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 - Pseudosida ramosa - Neonate	21 days
	Chronic NOEC 3.2 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	21 days

# Section 12. Ecological information

	Chronic NOEC 0.8 mg/l Fresh water	Fish - Gambusia holbrooki	28 days
Protein 250 Destain Solution			
Sodium dodecyl sulphate	Acute EC50 1200 µg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute LC50 900 μg/l Marine water	Crustaceans - Artemia salina - 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 - Cirrhinus mrigala - 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 - Pseudosida ramosa - 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 - Gambusia holbrooki	28 days

### Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Protein 250 Gel Matrix Sodium dodecyl sulphate	OECD 301B Ready Biodegradability - CO2 Evolution	95 % - Readily - 28 days	20 mg/l	-
Protein 250 Destain Solution	Test			
Sodium dodecyl sulphate	OECD 301B Ready Biodegradability - CO2 Evolution Test	95 % - Readily - 28 days	20 mg/l	-

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

### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
Protein 250 Gel Matrix Sodium dodecyl sulphate	-2.03	-	Low
Protein 250 Destain Solution Sodium dodecyl sulphate	-2.03	-	Low

### **Mobility in soil**

Soil/water partition coefficient (Koc)

: Not available.

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

Date of issue/Date of revision: 20/05/2024Date of previous issue: 03/09/2020Version: 816/18

### Section 13. Disposal considerations

#### **Disposal methods**

: The generation of waste should be avoided or minimised 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

### **Section 14. Transport information**

**ADG / IMDG / IATA** : Not regulated as Dangerous Goods according to the ADG Code .

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: Not available.

to IMO instruments

### Section 15. Regulatory information

Standard for the Uniform Scheduling of Medicines and Poisons

Not regulated.

Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

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. **New Zealand** : Not determined. **United States** : Not determined.

### Section 16. Any other relevant information

**History** 

Date of issue/Date of

revision

Date of previous issue

: 03/09/2020

: 20/05/2024

: 8 Version

Date of issue/Date of revision : 20/05/2024 : 03/09/2020 Version: 8 17/18 Date of previous issue

# Section 16. Any other relevant information

**Key to abbreviations** 

: ADG = Australian Dangerous Goods

ADR = The European Agreement concerning the International Carriage of

Dangerous Goods by Road 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

SUSMP = Standard Uniform Schedule of Medicine and Poisons

**UN = United Nations** 

#### Procedure used to derive the classification

Classification	Justification
Frotein 250 Gel Matrix SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A	Calculation method
Protein 250 Destain Solution SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A	Calculation method

<sup>✓</sup> Indicates information that has changed from previously issued version.

#### **Notice to reader**

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Date of issue/Date of revision : 20/05/2024 Date of previous issue : 03/09/2020 Version : 8 18/18