

# SAFETY DATA SHEET

ProteoAnalyzer Verification Kit, Part Number 5191-6642

## Section 1. Identification

### 1.1 Product identifier

<b>Product name</b>	: ProteoAnalyzer Verification Kit, Part Number 5191-6642
<b>Part no. (chemical kit)</b>	: 5191-6642
<b>Part no.</b>	: <u>Protein Verification Kit, RT</u> 5008-0020
	Protein Fluorescent Dye 5191-6650
	Dye Resuspension DMF 5191-6651
	Capillary Storage Solution GP-440-0100
	Protein Conditioning Solution 5008-0015
	2x Protein Inlet Buffer 5008-0017
	Protein Broad Range Gel 5008-0016
	<u>Protein Verification Kit, -20C</u> 5008-0019
	P240 Broad Range Ladder 5191-6648
	10x Protein Labeling Buffer 5191-6647

**Validation date** : 1/11/2024

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

<b>Identified uses</b>	: Analytical reagent.
	<u>Protein Fluorescent Dye</u> 50 µg
	Dye Resuspension DMF 1.5 ml
	Capillary Storage Solution 100 ml
	Protein Conditioning Solution 175 ml
	2x Protein Inlet Buffer 75 ml
	Protein Broad Range Gel 60 ml
	P240 Broad Range Ladder 0.03 ml
	10x Protein Labeling Buffer 1.1 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

<b>OSHA/HCS status</b>	: <u>Protein Fluorescent Dye</u>	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
	Dye Resuspension DMF	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
	Capillary Storage Solution	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
	Protein Conditioning 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.
	2x Protein Inlet Buffer	While this material is not considered hazardous by the

## Section 2. Hazards identification

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 Broad Range Gel

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.

P240 Broad Range Ladder

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

10x Protein Labeling 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

#### Protein Fluorescent Dye

COMBUSTIBLE DUSTS

#### Dye Resuspension DMF

H226

FLAMMABLE LIQUIDS - Category 3

H312

ACUTE TOXICITY (dermal) - Category 4

H319

EYE IRRITATION - Category 2A

H350

CARCINOGENICITY - Category 1B

#### Capillary Storage Solution

H320

EYE IRRITATION - Category 2B

H317

SKIN SENSITIZATION - Category 1

#### P240 Broad Range Ladder

H320

EYE IRRITATION - Category 2B

 Protein Inlet Buffer

Percentage of the mixture consisting of ingredient (s) of unknown hazards to the aquatic environment: 4.5%

Protein Broad Range Gel

Percentage of the mixture consisting of ingredient (s) of unknown hazards to the aquatic environment: 2.2%

### 2.2 GHS label elements

#### Hazard pictograms

: Dye Resuspension DMF







Capillary Storage Solution



#### Signal word

:


## Section 2. Hazards identification

<b>Hazard statements</b>	 Protein Fluorescent Dye Dye Resuspension DMF Capillary Storage Solution Protein Conditioning Solution 2x Protein Inlet Buffer Protein Broad Range Gel P240 Broad Range Ladder 10x Protein Labeling Buffer	Warning Danger Warning No signal word. No signal word. No signal word. Warning No signal word.
	:  Protein Fluorescent Dye Dye Resuspension DMF  Capillary Storage Solution  Protein Conditioning Solution 2x Protein Inlet Buffer Protein Broad Range Gel P240 Broad Range Ladder 10x Protein Labeling Buffer	May form combustible dust concentrations in air. H226 - Flammable liquid and vapor. H312 - Harmful in contact with skin. H319 - Causes serious eye irritation. H350 - May cause cancer. H317 - May cause an allergic skin reaction. H320 - Causes eye irritation. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. H320 - Causes eye irritation. No known significant effects or critical hazards.
<b><u>Precautionary statements</u></b>		
<b>Prevention</b>	:  Protein Fluorescent Dye Dye Resuspension DMF  Capillary Storage Solution  Protein Conditioning Solution 2x Protein Inlet Buffer Protein Broad Range Gel P240 Broad Range Ladder 10x Protein Labeling Buffer	Not applicable. P201 - Obtain special instructions before use. P280 - Wear protective gloves, protective clothing and eye or face protection. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P241 - Use explosion-proof electrical, ventilating or lighting equipment. P242 - Use non-sparking tools. P243 - Take action to prevent static discharges. P280 - Wear protective gloves. P261 - Avoid breathing vapor. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
<b>Response</b>	:  Protein Fluorescent Dye Dye Resuspension DMF  Capillary Storage Solution	Not applicable. P308 + P313 - IF exposed or concerned: Get medical advice or attention. P302 + P312 - IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. 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. P363 - Wash contaminated clothing before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water. P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

## Section 2. Hazards identification

	Protein Conditioning Solution 2x Protein Inlet Buffer Protein Broad Range Gel P240 Broad Range Ladder	P337 + P313 - If eye irritation persists: Get medical advice or attention. Not applicable. Not applicable. Not applicable. 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.
<b>Storage</b>	10x Protein Labeling Buffer : Protein Fluorescent Dye Dye Resuspension DMF	Not applicable. P403 + P235 - Store in a well-ventilated place. Keep cool.
	Capillary Storage Solution Protein Conditioning Solution 2x Protein Inlet Buffer Protein Broad Range Gel P240 Broad Range Ladder 10x Protein Labeling Buffer	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
<b>Disposal</b>	: Protein Fluorescent Dye Dye Resuspension DMF	Not applicable. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	Capillary Storage Solution	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	Protein Conditioning Solution 2x Protein Inlet Buffer Protein Broad Range Gel P240 Broad Range Ladder 10x Protein Labeling Buffer	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
<b>Supplemental label elements</b>	: Protein Fluorescent Dye	Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent dust accumulation.
	Dye Resuspension DMF Capillary Storage Solution Protein Conditioning Solution 2x Protein Inlet Buffer Protein Broad Range Gel P240 Broad Range Ladder 10x Protein Labeling Buffer	None known. None known. None known. None known. None known. None known. None known.
<b>2.3 Other hazards</b>		
<b>Hazards not otherwise classified</b>	: Protein Fluorescent Dye Dye Resuspension DMF Capillary Storage Solution Protein Conditioning Solution 2x Protein Inlet Buffer Protein Broad Range Gel P240 Broad Range Ladder 10x Protein Labeling Buffer	None known. None known. None known. None known. None known. None known. None known. None known.

### Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	:	<div> <div>  </div> <div> Protein Fluorescent Dye  Dye Resuspension DMF  Capillary Storage Solution  Protein Conditioning Solution  2x Protein Inlet Buffer  Protein Broad Range Gel  P240 Broad Range Ladder  10x Protein Labeling Buffer </div> </div>	<div> <div>Substance</div> <div>Substance</div> <div>Mixture</div> <div>Mixture</div> <div>Mixture</div> <div>Mixture</div> <div>Mixture</div> <div>Mixture</div> </div>
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Ingredient name	%	CAS number
<b>Protein Fluorescent Dye</b>		
Proprietary	Proprietary	-
<b>Dye Resuspension DMF</b>		
N,N-Dimethylformamide	100	68-12-2
<b>Capillary Storage Solution</b>		
Glycerol	≥50 - ≤75	56-81-5
2-Methyl-2H-isothiazol-3-one	<0.1	2682-20-4
<b>2x Protein Inlet Buffer</b>		
Trometamol	≤5	77-86-1
Sodium dodecyl sulphate	<1	151-21-3
<b>Protein Broad Range Gel</b>		
Trometamol	≤3	77-86-1
Sodium dodecyl sulphate	<1	151-21-3
<b>P240 Broad Range Ladder</b>		
Glycerol	≥10 - ≤25	56-81-5
<b>10x Protein Labeling Buffer</b>		
Sodium dodecyl sulphate	≤5	151-21-3

\* Non-hazardous ingredients

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

**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 Fluorescent Dye

Dye Resuspension DMF

Capillary Storage Solution

Protein Conditioning Solution

2x Protein Inlet Buffer

Protein Broad Range Gel

P240 Broad Range Ladder

10x Protein Labeling 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.

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, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.

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.

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.

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.

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. If irritation persists, get medical attention.

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 Fluorescent Dye

Dye Resuspension DMF

Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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 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.

Capillary Storage 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

## Section 4. First aid measures

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 Conditioning 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.

2x Protein Inlet Buffer

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 Broad Range Gel

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.

P240 Broad Range Ladder

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.

10x Protein Labeling Buffer

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.

### Skin contact

:  Protein Fluorescent Dye

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Dye Resuspension DMF

Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly



## Section 4. First aid measures

	Capillary Storage Solution	before reuse. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	Protein Conditioning Solution	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	2x Protein Inlet Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Protein Broad Range Gel	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	P240 Broad Range Ladder	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.
	10x Protein Labeling Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: Protein Fluorescent Dye	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.
	Dye Resuspension DMF	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. 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.
	Capillary Storage 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 Conditioning Solution	Wash out mouth with water. If material has been swallowed and the exposed person is conscious,



## Section 4. First aid measures

2x Protein Inlet Buffer

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.

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 Broad Range Gel

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.

P240 Broad Range Ladder

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.

10x Protein Labeling 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.

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

#### Potential acute health effects

##### Eye contact

: Protein Fluorescent Dye

Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

Causes serious eye irritation.

Causes eye irritation.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

Causes eye irritation.

No known significant effects or critical hazards.

##### Inhalation

: Protein Fluorescent Dye

Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

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.

## Section 4. First aid measures

<b>Skin contact</b>	: Protein Fluorescent Dye	No known significant effects or critical hazards.
	Dye Resuspension DMF	Harmful in contact with skin.
	Capillary Storage Solution	May cause an allergic skin reaction.
	Protein Conditioning Solution	No known significant effects or critical hazards.
	2x Protein Inlet Buffer	No known significant effects or critical hazards.
	Protein Broad Range Gel	No known significant effects or critical hazards.
	P240 Broad Range Ladder	No known significant effects or critical hazards.
<b>Ingestion</b>	10x Protein Labeling Buffer	No known significant effects or critical hazards.
	: Protein Fluorescent Dye	No known significant effects or critical hazards.
	Dye Resuspension DMF	No known significant effects or critical hazards.
	Capillary Storage Solution	No known significant effects or critical hazards.
	Protein Conditioning Solution	No known significant effects or critical hazards.
	2x Protein Inlet Buffer	No known significant effects or critical hazards.
	Protein Broad Range Gel	No known significant effects or critical hazards.
<b>Over-exposure signs/symptoms</b>	P240 Broad Range Ladder	No known significant effects or critical hazards.
	10x Protein Labeling Buffer	No known significant effects or critical hazards.
	: Protein Fluorescent Dye	No known significant effects or critical hazards.
	Dye Resuspension DMF	No known significant effects or critical hazards.
	Capillary Storage Solution	No known significant effects or critical hazards.
	Protein Conditioning Solution	No known significant effects or critical hazards.
	2x Protein Inlet Buffer	No known significant effects or critical hazards.
<b>Eye contact</b>	Protein Broad Range Gel	No known significant effects or critical hazards.
	P240 Broad Range Ladder	No known significant effects or critical hazards.
	10x Protein Labeling Buffer	No known significant effects or critical hazards.
	: Protein Fluorescent Dye	Adverse symptoms may include the following: irritation redness
	Dye Resuspension DMF	Adverse symptoms may include the following: pain or irritation watering redness
	Capillary Storage Solution	Adverse symptoms may include the following: irritation watering redness
	Protein Conditioning Solution	No specific data.
<b>Inhalation</b>	2x Protein Inlet Buffer	No specific data.
	Protein Broad Range Gel	No specific data.
	P240 Broad Range Ladder	Adverse symptoms may include the following: irritation watering redness
	10x Protein Labeling Buffer	No specific data.
	: Protein Fluorescent Dye	Adverse symptoms may include the following: respiratory tract irritation coughing
	Dye Resuspension DMF	No specific data.
	Capillary Storage Solution	No specific data.
<b>Skin contact</b>	Protein Conditioning Solution	No specific data.
	2x Protein Inlet Buffer	No specific data.
	Protein Broad Range Gel	No specific data.
	P240 Broad Range Ladder	No specific data.
	10x Protein Labeling Buffer	No specific data.
	: Protein Fluorescent Dye	No specific data.
	Dye Resuspension DMF	No specific data.
<b>Skin contact</b>	Capillary Storage Solution	Adverse symptoms may include the following: irritation redness
	Protein Conditioning Solution	No specific data.
	2x Protein Inlet Buffer	No specific data.
	Protein Broad Range Gel	No specific data.
	P240 Broad Range Ladder	No specific data.
	10x Protein Labeling Buffer	No specific data.
	: Protein Fluorescent Dye	No specific data.

## Section 4. First aid measures

<b>Ingestion</b>	<b>:</b>	Protein Fluorescent Dye	No specific data.
		Dye Resuspension DMF	No specific data.
		Capillary Storage Solution	No specific data.
		Protein Conditioning Solution	No specific data.
		2x Protein Inlet Buffer	No specific data.
		Protein Broad Range Gel	No specific data.
		P240 Broad Range Ladder	No specific data.
		10x Protein Labeling Buffer	No specific data.

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

<b>Notes to physician</b>	<b>:</b>	Protein Fluorescent Dye	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Dye Resuspension DMF	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.
		Capillary Storage 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 Conditioning 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.
		2x Protein Inlet 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.
		Protein Broad Range Gel	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.
		P240 Broad Range Ladder	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		10x Protein Labeling 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.
<b>Specific treatments</b>	<b>:</b>	Protein Fluorescent Dye	No specific treatment.
		Dye Resuspension DMF	No specific treatment.
		Capillary Storage Solution	No specific treatment.
		Protein Conditioning Solution	No specific treatment.
		2x Protein Inlet Buffer	No specific treatment.
		Protein Broad Range Gel	No specific treatment.
		P240 Broad Range Ladder	No specific treatment.
		10x Protein Labeling Buffer	No specific treatment.
<b>Protection of first-aiders</b>	<b>:</b>	Protein Fluorescent Dye	No action shall be taken involving any personal risk or without suitable training.
		Dye Resuspension DMF	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
		Capillary Storage Solution	No action shall be taken involving any personal risk

## Section 4. First aid measures

Protein Conditioning Solution

2x Protein Inlet Buffer

Protein Broad Range Gel

P240 Broad Range Ladder

10x Protein Labeling Buffer

or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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.

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.

No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

: Protein Fluorescent Dye  
Dye Resuspension DMF  
Capillary Storage Solution

Protein Conditioning Solution

2x Protein Inlet Buffer

Protein Broad Range Gel

P240 Broad Range Ladder

10x Protein Labeling Buffer

Use dry chemical powder.

Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

Use an extinguishing agent suitable for the surrounding fire.

Use an extinguishing agent suitable for the surrounding fire.

Use an extinguishing agent suitable for the surrounding fire.

Use an extinguishing agent suitable for the surrounding fire.

Use an extinguishing agent suitable for the surrounding fire.

Use an extinguishing agent suitable for the surrounding fire.

#### Unsuitable extinguishing media

: Protein Fluorescent Dye  
Dye Resuspension DMF  
Capillary Storage Solution  
Protein Conditioning Solution  
2x Protein Inlet Buffer  
Protein Broad Range Gel  
P240 Broad Range Ladder  
10x Protein Labeling Buffer

Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.

Do not use water jet.

None known.

None known.

None known.

None known.

None known.

None known.

### 5.2 Special hazards arising from the substance or mixture

#### Specific hazards arising from the chemical

: Protein Fluorescent Dye  
Dye Resuspension DMF

May form explosible dust-air mixture if dispersed.

Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

Capillary Storage Solution

In a fire or if heated, a pressure increase will occur and the container may burst.

## Section 5. Fire-fighting measures

<b>Hazardous thermal decomposition products</b>	Protein Conditioning Solution	In a fire or if heated, a pressure increase will occur and the container may burst.
	2x Protein Inlet Buffer	In a fire or if heated, a pressure increase will occur and the container may burst.
	Protein Broad Range Gel	In a fire or if heated, a pressure increase will occur and the container may burst.
	P240 Broad Range Ladder	In a fire or if heated, a pressure increase will occur and the container may burst.
	10x Protein Labeling Buffer	In a fire or if heated, a pressure increase will occur and the container may burst.
	Protein Fluorescent Dye	No specific data.
	Dye Resuspension DMF	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides
	Capillary Storage Solution	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides
	Protein Conditioning Solution	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides
	2x Protein Inlet Buffer	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides
	Protein Broad Range Gel	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides
	P240 Broad Range Ladder	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	10x Protein Labeling Buffer	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides metal oxide/oxides

### 5.3 Advice for firefighters

#### Special protective actions for fire-fighters

Protein Fluorescent Dye	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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Dye Resuspension DMF	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

## Section 5. Fire-fighting measures

without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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.

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.

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.

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.

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.

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.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### Special protective equipment for fire-fighters

:  Protein Fluorescent Dye

Dye Resuspension DMF

Capillary Storage Solution

Protein Conditioning Solution

2x Protein Inlet Buffer

Protein Broad Range Gel

P240 Broad Range Ladder

10x Protein Labeling Buffer



## Section 6. Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency  
personnel

: Protein Fluorescent Dye

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Put on appropriate personal protective equipment.

Dye Resuspension DMF

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist.

Capillary Storage Solution

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 personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Protein Conditioning 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.

2x Protein Inlet 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.

Protein Broad Range Gel

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.

P240 Broad Range Ladder

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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

10x Protein Labeling 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



## Section 6. Accidental release measures

**For emergency responders :**  Protein Fluorescent Dye

Dye Resuspension DMF

Capillary Storage Solution

Protein Conditioning Solution

2x Protein Inlet Buffer

Protein Broad Range Gel


P240 Broad Range Ladder

10x Protein Labeling Buffer

appropriate personal protective equipment.

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". 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". 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". 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". 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". 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". 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 Fluorescent Dye

Dye Resuspension DMF

Capillary Storage Solution

Protein Conditioning Solution

2x Protein Inlet Buffer

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).

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).

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).

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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).

## Section 6. Accidental release measures

Protein Broad Range Gel	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).
P240 Broad Range Ladder	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).
10x Protein Labeling Buffer	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).

### 6.3 Methods and materials for containment and cleaning up

**Methods for cleaning up** :  Protein Fluorescent Dye

Dye Resuspension DMF	Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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.
Capillary Storage 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 Conditioning 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.
2x Protein Inlet 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.
Protein Broad Range Gel	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.
P240 Broad Range Ladder	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 6. Accidental release measures

10x Protein Labeling 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 Fluorescent Dye

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container. Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.


Dye Resuspension DMF

Capillary Storage Solution

Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor 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.


## Section 7. Handling and storage

### Advice on general occupational hygiene

Protein Conditioning Solution	Put on appropriate personal protective equipment (see Section 8).
2x Protein Inlet Buffer	Put on appropriate personal protective equipment (see Section 8).
Protein Broad Range Gel	Put on appropriate personal protective equipment (see Section 8).
P240 Broad Range Ladder	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor 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.
10x Protein Labeling Buffer	Put on appropriate personal protective equipment (see Section 8).
 Protein Fluorescent Dye	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.
Dye Resuspension DMF	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.
Capillary Storage 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 Conditioning 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.
2x Protein Inlet 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.
Protein Broad Range Gel	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.
P240 Broad Range Ladder	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and

## Section 7. Handling and storage

### 7.2 Conditions for safe storage, including any incompatibilities

10x Protein Labeling Buffer		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. 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 Fluorescent Dye	Store in accordance with local regulations. Store in a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. 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.
Dye Resuspension DMF		Store in accordance with local regulations. Store in a segregated and approved area. 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. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. 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.
Capillary Storage 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 Conditioning 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

## Section 7. Handling and storage

2x Protein Inlet Buffer

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

Protein Broad Range Gel

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.

P240 Broad Range Ladder

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.

10x Protein Labeling 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 Fluorescent Dye  
 Dye Resuspension DMF  
 Capillary Storage Solution  
 Protein Conditioning Solution  
 2x Protein Inlet Buffer  
 Protein Broad Range Gel  
 P240 Broad Range Ladder  
 10x Protein Labeling Buffer

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



## Section 7. Handling and storage

<b>Industrial sector specific solutions</b>	<b>:</b>	Protein Fluorescent Dye	Not available.
		Dye Resuspension DMF	Not available.
		Capillary Storage Solution	Not available.
		Protein Conditioning Solution	Not available.
		2x Protein Inlet Buffer	Not available.
		Protein Broad Range Gel	Not available.
		P240 Broad Range Ladder	Not available.
		10x Protein Labeling Buffer	Not available.

## Section 8. Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
<b>Protein Fluorescent Dye</b> Proprietary	None.
<b>Dye Resuspension DMF</b> N,N-Dimethylformamide	<p><b>ACGIH TLV (United States, 1/2022).</b>  <b>Absorbed through skin.</b>  TWA: 5 ppm 8 hours.  TWA: 30 mg/m<sup>3</sup> 8 hours.</p> <p><b>OSHA PEL 1989 (United States, 3/1989).</b>  <b>Absorbed through skin.</b>  TWA: 10 ppm 8 hours.  TWA: 30 mg/m<sup>3</sup> 8 hours.</p> <p><b>NIOSH REL (United States, 10/2020).</b>  <b>Absorbed through skin.</b>  TWA: 10 ppm 10 hours.  TWA: 30 mg/m<sup>3</sup> 10 hours.</p> <p><b>OSHA PEL (United States, 5/2018).</b>  <b>Absorbed through skin.</b>  TWA: 10 ppm 8 hours.  TWA: 30 mg/m<sup>3</sup> 8 hours.</p> <p><b>CAL OSHA PEL (United States, 5/2018).</b>  <b>Absorbed through skin.</b>  TWA: 30 mg/m<sup>3</sup> 8 hours.  TWA: 10 ppm 8 hours.</p>
<b>Capillary Storage Solution</b> Glycerol	<p><b>OSHA PEL 1989 (United States, 3/1989).</b>  TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction  TWA: 10 mg/m<sup>3</sup> 8 hours. Form: Total dust</p> <p><b>OSHA PEL (United States, 5/2018).</b>  TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction  TWA: 15 mg/m<sup>3</sup> 8 hours. Form: Total dust</p> <p><b>CAL OSHA PEL (United States, 5/2018).</b>  TWA: 5 mg/m<sup>3</sup> 8 hours. Form: respirable fraction  TWA: 10 mg/m<sup>3</sup> 8 hours. Form: total dust</p>
2-Methyl-2H-isothiazol-3-one	None.
<b>2x Protein Inlet Buffer</b> Trometamol Sodium dodecyl sulphate	None. None.



## Section 8. Exposure controls/personal protection

<b>Protein Broad Range Gel</b> Trometamol Sodium dodecyl sulphate	None. None.
<b>P240 Broad Range Ladder</b> Glycerol	<b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Respirable fraction TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Total dust <b>OSHA PEL (United States, 5/2018).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Respirable fraction TWA: 15 mg/m <sup>3</sup> 8 hours. Form: Total dust <b>CAL OSHA PEL (United States, 5/2018).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: respirable fraction TWA: 10 mg/m <sup>3</sup> 8 hours. Form: total dust
<b>10x Protein Labeling Buffer</b> Sodium dodecyl sulphate	None.

## Biological exposure indices

Ingredient name	Exposure indices
<b>Dye Resuspension DMF</b>  N,N-Dimethylformamide	<b>ACGIH BEI (United States, 1/2022)</b> BEI: 30 mg/l, total N-methylformamide [in urine]. Sampling time: end of shift. BEI: 30 mg/l, N-acetyl-S-(N-methylcarbamoyl) cysteine [in urine]. Sampling time: end of shift at end of workweek.

## 8.2 Exposure controls

## Appropriate engineering controls

- If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

## 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: chemical splash goggles.

### Skin protection

## Section 8. Exposure controls/personal 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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- 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

<b>Physical state</b>	Protein Fluorescent Dye	Solid. [Lyophilized Powder.]
	Dye Resuspension DMF	Liquid.
	Capillary Storage Solution	Liquid.
	Protein Conditioning Solution	Liquid.
	2x Protein Inlet Buffer	Liquid.
	Protein Broad Range Gel	Liquid.
	P240 Broad Range Ladder	Liquid.
	10x Protein Labeling Buffer	Liquid.
<b>Color</b>	Protein Fluorescent Dye	Yellow./ Brown.
	Dye Resuspension DMF	Colorless to light yellow.
	Capillary Storage Solution	Not available.
	Protein Conditioning Solution	Not available.
	2x Protein Inlet Buffer	Not available.
	Protein Broad Range Gel	Not available.
	P240 Broad Range Ladder	Not available.
	10x Protein Labeling Buffer	Not available.
<b>Odor</b>	Protein Fluorescent Dye	Not available.
	Dye Resuspension DMF	Faint odor. [Slight]
	Capillary Storage Solution	Not available.
	Protein Conditioning Solution	Not available.
	2x Protein Inlet Buffer	Not available.
	Protein Broad Range Gel	Not available.
	P240 Broad Range Ladder	Not available.
	10x Protein Labeling Buffer	Not available.
<b>Odor threshold</b>	Protein Fluorescent Dye	Not available.
	Dye Resuspension DMF	Not available.
	Capillary Storage Solution	Not available.
	Protein Conditioning Solution	Not available.
	2x Protein Inlet Buffer	Not available.
	Protein Broad Range Gel	Not available.
	P240 Broad Range Ladder	Not available.
	10x Protein Labeling Buffer	Not available.
<b>pH</b>		

## Section 9. Physical and chemical properties and safety characteristics

	Protein Fluorescent Dye	Not available.
	Dye Resuspension DMF	6.7
	Capillary Storage Solution	8.3
	Protein Conditioning Solution	9.68 to 9.94
	2x Protein Inlet Buffer	8.18 to 8.31
	Protein Broad Range Gel	8 to 8.5
	P240 Broad Range Ladder	8.4 to 8.6
	10x Protein Labeling Buffer	8.87
<b>Melting point/freezing point</b>	Protein Fluorescent Dye	Not available.
	Dye Resuspension DMF	-61°C (-77.8°F)
	Capillary Storage Solution	Not available.
	Protein Conditioning Solution	Not available.
	2x Protein Inlet Buffer	Not available.
	Protein Broad Range Gel	Not available.
	P240 Broad Range Ladder	Not available.
	10x Protein Labeling Buffer	Not available.
<b>Boiling point, initial boiling point, and boiling range</b>	Protein Fluorescent Dye	Not available.
	Dye Resuspension DMF	153°C (307.4°F)
	Capillary Storage Solution	Not available.
	Protein Conditioning Solution	Not available.
	2x Protein Inlet Buffer	Not available.
	Protein Broad Range Gel	Not available.
	P240 Broad Range Ladder	Not available.
	10x Protein Labeling Buffer	Not available.
<b>Flash point</b>	Protein Fluorescent Dye	Not applicable.
	Dye Resuspension DMF	Closed cup: 57.5°C (135.5°F) [DIN 51755]
	Capillary Storage Solution	Not available.
	Protein Conditioning Solution	Not available.
	2x Protein Inlet Buffer	Not available.
	Protein Broad Range Gel	Not available.
	P240 Broad Range Ladder	Not available.
	10x Protein Labeling Buffer	Not available.

Ingredient name	Closed cup			Open cup		
	°C	°F	Method	°C	°F	Method
<b>Capillary Storage Solution</b>						
Glycerol	-	-	-	177	350.6	-
<b>P240 Broad Range Ladder</b>						
Glycerol	-	-	-	177	350.6	-
<b>10x Protein Labeling Buffer</b>						
Sodium dodecyl sulphate	170	338	-	-	-	-

## Section 9. Physical and chemical properties and safety characteristics

**Evaporation rate** : Protein Fluorescent Dye Not available.  
 Dye Resuspension DMF 0.2 (butyl acetate = 1)  
 Capillary Storage Solution Not available.  
 Protein Conditioning Solution Not available.  
 2x Protein Inlet Buffer Not available.  
 Protein Broad Range Gel Not available.  
 P240 Broad Range Ladder Not available.  
 10x Protein Labeling Buffer Not available.

**Flammability** : Protein Fluorescent Dye Not available.  
 Dye Resuspension DMF Not applicable.  
 Capillary Storage Solution Not applicable.  
 Protein Conditioning Solution Not applicable.  
 2x Protein Inlet Buffer Not applicable.  
 Protein Broad Range Gel Not applicable.  
 P240 Broad Range Ladder Not applicable.  
 10x Protein Labeling Buffer Not applicable.

**Lower and upper explosion limit/flammability limit** : Protein Fluorescent Dye Not applicable.  
 Dye Resuspension DMF Lower: 2.2%  
 Upper: 15.2%  
 Capillary Storage Solution Not available.  
 Protein Conditioning Solution Not available.  
 2x Protein Inlet Buffer Not available.  
 Protein Broad Range Gel Not available.  
 P240 Broad Range Ladder Not available.  
 10x Protein Labeling Buffer Not available.

**Vapor pressure** : Dye Resuspension DMF 0.49 kPa (3.7 mm Hg)

Ingredient name	Vapor Pressure at 20°C			Vapor pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
<b>Capillary Storage Solution</b>						
water	17.5	2.3	-	92.258	12.3	-
Glycerol	0.000075	0.00001	-	0.0025	0.00033	-
<b>Protein Conditioning Solution</b>						
water	17.5	2.3	-	92.258	12.3	-
<b>2x Protein Inlet Buffer</b>						
water	17.5	2.3	-	92.258	12.3	-
Trometamol	<0.00075006	<0.0001	-	-	-	-
<b>Protein Broad Range Gel</b>						
water	17.5	2.3	-	92.258	12.3	-
Trometamol	<0.00075006	<0.0001	-	-	-	-

## Section 9. Physical and chemical properties and safety characteristics

<b>P240 Broad Range Ladder</b>							
water	17.5	2.3	-		92.258	12.3	-
Glycerol	0.000075	0.00001	-		0.0025	0.00033	-
<b>10x Protein Labeling Buffer</b>							
water	17.5	2.3	-		92.258	12.3	-
Sodium dodecyl sulphate	≤0.0013501	≤0.00018	-		-	-	-

**Relative vapor density** : Protein Fluorescent Dye Not applicable.  
Dye Resuspension DMF 2.5 [Air = 1]  
Capillary Storage Solution Not available.  
Protein Conditioning Solution Not available.  
2x Protein Inlet Buffer Not available.  
Protein Broad Range Gel Not available.  
P240 Broad Range Ladder Not available.  
10x Protein Labeling Buffer Not available.

**Relative density** : Protein Fluorescent Dye Not available.  
Dye Resuspension DMF 0.95  
Capillary Storage Solution Not available.  
Protein Conditioning Solution Not available.  
2x Protein Inlet Buffer Not available.  
Protein Broad Range Gel Not available.  
P240 Broad Range Ladder Not available.  
10x Protein Labeling Buffer Not available.

<b>Solubility(ies)</b>	<b>Media</b>	<b>Result</b>
	<b>Protein Fluorescent Dye</b>	
	water	Soluble
	<b>Dye Resuspension DMF</b>	
	water	Soluble
	<b>Capillary Storage Solution</b>	
	water	Soluble
	<b>Protein Conditioning Solution</b>	
	water	Soluble
	<b>2x Protein Inlet Buffer</b>	
	water	Soluble
	<b>Protein Broad Range Gel</b>	
	water	Soluble
	<b>P240 Broad Range Ladder</b>	
	water	Soluble
	<b>10x Protein Labeling Buffer</b>	
	water	Soluble

**Partition coefficient: n-octanol/water** : Protein Fluorescent Dye Not applicable.  
Dye Resuspension DMF -1.01  
Capillary Storage Solution Not applicable.  
Protein Conditioning Solution Not applicable.  
2x Protein Inlet Buffer Not applicable.  
Protein Broad Range Gel Not applicable.  
P240 Broad Range Ladder Not applicable.  
10x Protein Labeling Buffer Not applicable.

## Section 9. Physical and chemical properties and safety characteristics

**Auto-ignition temperature** : Protein Fluorescent Dye Not applicable.  
Dye Resuspension DMF 445°C (833°F)

Ingredient name	°C	°F	Method
<b>Capillary Storage Solution</b>			
Glycerol	370	698	-
<b>P240 Broad Range Ladder</b>			
Glycerol	370	698	-
<b>10x Protein Labeling Buffer</b>			
Sodium dodecyl sulphate	310.5	590.9	VDI 2263

**Decomposition temperature** : Protein Fluorescent Dye Not available.  
Dye Resuspension DMF >350°C (>662°F)  
Capillary Storage Solution Not available.  
Protein Conditioning Solution Not available.  
2x Protein Inlet Buffer Not available.  
Protein Broad Range Gel Not available.  
P240 Broad Range Ladder Not available.  
10x Protein Labeling Buffer Not available.

**Viscosity** : Protein Fluorescent Dye Not applicable.  
Dye Resuspension DMF Dynamic: 0.802 mPa·s (0.802 cP)  
Capillary Storage Solution Not available.  
Protein Conditioning Solution Not available.  
2x Protein Inlet Buffer Not available.  
Protein Broad Range Gel Not available.  
P240 Broad Range Ladder Not available.  
10x Protein Labeling Buffer Not available.

### Particle characteristics

**Median particle size** : Protein Fluorescent Dye Not available.  
Dye Resuspension DMF Not applicable.  
Capillary Storage Solution Not applicable.  
Protein Conditioning Solution Not applicable.  
2x Protein Inlet Buffer Not applicable.  
Protein Broad Range Gel Not applicable.  
P240 Broad Range Ladder Not applicable.  
10x Protein Labeling Buffer Not applicable.


## Section 10. Stability and reactivity

**10.1 Reactivity** : Protein Fluorescent Dye No specific test data related to reactivity available for this product or its ingredients.  
Dye Resuspension DMF No specific test data related to reactivity available for this product or its ingredients.  
Capillary Storage Solution No specific test data related to reactivity available for this product or its ingredients.  
Protein Conditioning Solution No specific test data related to reactivity available for this product or its ingredients.  
2x Protein Inlet Buffer No specific test data related to reactivity available for this product or its ingredients.  
Protein Broad Range Gel No specific test data related to reactivity available for this product or its ingredients.  
P240 Broad Range Ladder No specific test data related to reactivity available for this product or its ingredients.  
10x Protein Labeling Buffer No specific test data related to reactivity available

## Section 10. Stability and reactivity


for this product or its ingredients.

### 10.2 Chemical stability

 Protein Fluorescent Dye  
 Dye Resuspension DMF  
 Capillary Storage Solution  
 Protein Conditioning Solution  
 2x Protein Inlet Buffer  
 Protein Broad Range Gel  
 P240 Broad Range Ladder  
 10x Protein Labeling Buffer


The product is stable.  
 The product is stable.  
 The product is stable.  
 The product is stable.  
 The product is stable.  
 The product is stable.  
 The product is stable.  
 The product is stable.

### 10.3 Possibility of hazardous reactions

 Protein Fluorescent Dye  
 Dye Resuspension DMF  
 Capillary Storage Solution  
 Protein Conditioning Solution  
 2x Protein Inlet Buffer  
 Protein Broad Range Gel  
 P240 Broad Range Ladder  
 10x Protein Labeling Buffer


Under normal conditions of storage and use, hazardous reactions will not occur.  
 Under normal conditions of storage and use, hazardous reactions will not occur.  
 Under normal conditions of storage and use, hazardous reactions will not occur.  
 Under normal conditions of storage and use, hazardous reactions will not occur.  
 Under normal conditions of storage and use, hazardous reactions will not occur.  
 Under normal conditions of storage and use, hazardous reactions will not occur.  
 Under normal conditions of storage and use, hazardous reactions will not occur.  
 Under normal conditions of storage and use, hazardous reactions will not occur.

### 10.4 Conditions to avoid

 Protein Fluorescent Dye  
 Dye Resuspension DMF  
 Capillary Storage Solution  
 Protein Conditioning Solution  
 2x Protein Inlet Buffer  
 Protein Broad Range Gel  
 P240 Broad Range Ladder  
 10x Protein Labeling Buffer

Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation. Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.  
 No specific data.  
 No specific data.  
 No specific data.  
 No specific data.  
 No specific data.  
 No specific data.

### 10.5 Incompatible materials


 Protein Fluorescent Dye  
 Dye Resuspension DMF  
 Capillary Storage Solution  
 Protein Conditioning Solution  
 2x Protein Inlet Buffer

Reactive or incompatible with the following materials:  
 oxidizing materials  
 Reactive or incompatible with the following materials:  
 oxidizing materials  
 May react or be incompatible with oxidizing materials.  
 May react or be incompatible with oxidizing materials.  
 May react or be incompatible with oxidizing materials.



## Section 10. Stability and reactivity

### 10.6 Hazardous decomposition products

Protein Broad Range Gel	May react or be incompatible with oxidizing materials.
P240 Broad Range Ladder	May react or be incompatible with oxidizing materials.
10x Protein Labeling Buffer	May react or be incompatible with oxidizing materials.
 Protein Fluorescent Dye	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Dye Resuspension DMF	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Capillary Storage Solution	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Protein Conditioning Solution	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
2x Protein Inlet Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Protein Broad Range Gel	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
P240 Broad Range Ladder	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
10x Protein Labeling Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
<b>Dye Resuspension DMF</b> N,N-Dimethylformamide	LC50 Inhalation Vapor LC50 Inhalation Vapor LD50 Oral	Rat Rat Rat	3421 ppm 1948 ppm 4000 mg/kg	1 hours 4 hours -
<b>Capillary Storage Solution</b> Glycerol 2-Methyl-2H-isothiazol-3-one	LD50 Oral LC50 Inhalation Dusts and mists  LD50 Dermal LD50 Oral	Rat Rat - Male, Female Rat - Male, Female Rat - Male, Female	12600 mg/kg 0.11 mg/l  242 mg/kg 285.5 mg/kg	- 4 hours  - -
<b>2x Protein Inlet Buffer</b> Trometamol Sodium dodecyl sulphate	LD50 Dermal LD50 Oral	Rat Rat	>5000 mg/kg 1288 mg/kg	- -
<b>Protein Broad Range Gel</b> Trometamol Sodium dodecyl sulphate	LD50 Dermal LD50 Oral	Rat Rat	>5000 mg/kg 1288 mg/kg	- -

## Section 11. Toxicological information

<b>P240 Broad Range Ladder</b> Glycerol	LD50 Oral	Rat	12600 mg/kg	-
<b>10x Protein Labeling Buffer</b> Sodium dodecyl sulphate	LD50 Oral	Rat	1288 mg/kg	-

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>Dye Resuspension DMF</b> N,N-Dimethylformamide	Eyes - Severe irritant	Rabbit	-	100 %	-
<b>Capillary Storage Solution</b> Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
<b>2x Protein Inlet Buffer</b> Trometamol	Skin - Moderate irritant	Rabbit	-	25 %	-
	Skin - Severe irritant	Rabbit	-	500 mg	-
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	Rabbit	-	24 hours 50 mg	-
	Skin - Moderate irritant	Mouse	-	24 hours 25 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 25 mg	-
<b>Protein Broad Range Gel</b> Trometamol	Skin - Moderate irritant	Rabbit	-	25 %	-
	Skin - Severe irritant	Rabbit	-	500 mg	-
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	Rabbit	-	24 hours 50 mg	-
	Skin - Moderate irritant	Mouse	-	24 hours 25 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 25 mg	-
<b>P240 Broad Range Ladder</b> Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
<b>10x Protein Labeling Buffer</b> Sodium dodecyl sulphate	Eyes - Mild irritant	Rabbit	-	250 ug	-
	Eyes - Moderate irritant	Rabbit	-	10 mg	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-

## Section 11. Toxicological information

	Skin - Mild irritant	Guinea pig	-	mg 24 hours 25	-
	Skin - Mild irritant	Rabbit	-	mg 24 hours 50	-
	Skin - Moderate irritant	Mouse	-	mg 24 hours 25	-
	Skin - Moderate irritant	Rabbit	-	mg 24 hours 25	-

### Sensitization

Not available.

### Mutagenicity

**Conclusion/Summary** : Not available.

### Carcinogenicity

**Conclusion/Summary** : Not available.

### Classification

Product/ingredient name	OSHA	IARC	NTP
<b>Dye Resuspension DMF</b> N,N-Dimethylformamide	-	2A	-

### Reproductive toxicity

**Conclusion/Summary** : Not available.

### Teratogenicity

**Conclusion/Summary** : Not available.

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
<b>2x Protein Inlet Buffer</b> Trometamol	Category 3	-	Respiratory tract irritation
Sodium dodecyl sulphate	Category 3	-	Respiratory tract irritation
<b>Protein Broad Range Gel</b> Trometamol	Category 3	-	Respiratory tract irritation
Sodium dodecyl sulphate	Category 3	-	Respiratory tract irritation
<b>10x Protein Labeling Buffer</b> Sodium dodecyl sulphate	Category 3	-	Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

## Section 11. Toxicological information

### Information on the likely routes of exposure

Protein Fluorescent Dye	Not available.
Dye Resuspension DMF	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Capillary Storage Solution	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Protein Conditioning Solution	Not available.
2x Protein Inlet Buffer	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Protein Broad Range Gel	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
P240 Broad Range Ladder	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
10x Protein Labeling Buffer	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

### Potential acute health effects

#### Eye contact

Protein Fluorescent Dye	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
Dye Resuspension DMF	Causes serious eye irritation.
Capillary Storage Solution	Causes eye irritation.
Protein Conditioning Solution	No known significant effects or critical hazards.
2x Protein Inlet Buffer	No known significant effects or critical hazards.
Protein Broad Range Gel	No known significant effects or critical hazards.
P240 Broad Range Ladder	Causes eye irritation.
10x Protein Labeling Buffer	No known significant effects or critical hazards.

#### Inhalation

Protein Fluorescent Dye	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
Dye Resuspension DMF	No known significant effects or critical hazards.
Capillary Storage Solution	No known significant effects or critical hazards.
Protein Conditioning Solution	No known significant effects or critical hazards.
2x Protein Inlet Buffer	No known significant effects or critical hazards.
Protein Broad Range Gel	No known significant effects or critical hazards.
P240 Broad Range Ladder	No known significant effects or critical hazards.
10x Protein Labeling Buffer	No known significant effects or critical hazards.

#### Skin contact

Protein Fluorescent Dye	No known significant effects or critical hazards.
Dye Resuspension DMF	Harmful in contact with skin.
Capillary Storage Solution	May cause an allergic skin reaction.
Protein Conditioning Solution	No known significant effects or critical hazards.
2x Protein Inlet Buffer	No known significant effects or critical hazards.
Protein Broad Range Gel	No known significant effects or critical hazards.
P240 Broad Range Ladder	No known significant effects or critical hazards.
10x Protein Labeling Buffer	No known significant effects or critical hazards.

#### Ingestion

Protein Fluorescent Dye	No known significant effects or critical hazards.
Dye Resuspension DMF	No known significant effects or critical hazards.
Capillary Storage Solution	No known significant effects or critical hazards.
Protein Conditioning Solution	No known significant effects or critical hazards.
2x Protein Inlet Buffer	No known significant effects or critical hazards.
Protein Broad Range Gel	No known significant effects or critical hazards.
P240 Broad Range Ladder	No known significant effects or critical hazards.
10x Protein Labeling Buffer	No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

## Section 11. Toxicological information

<b>Eye contact</b>	: Protein Fluorescent Dye	Adverse symptoms may include the following: irritation redness
	Dye Resuspension DMF	Adverse symptoms may include the following: pain or irritation watering redness
	Capillary Storage Solution	Adverse symptoms may include the following: irritation watering redness
	Protein Conditioning Solution 2x Protein Inlet Buffer Protein Broad Range Gel P240 Broad Range Ladder	No specific data. No specific data. No specific data. Adverse symptoms may include the following: irritation watering redness
	10x Protein Labeling Buffer	No specific data.
<b>Inhalation</b>	: Protein Fluorescent Dye	Adverse symptoms may include the following: respiratory tract irritation coughing
	Dye Resuspension DMF	No specific data.
	Capillary Storage Solution	No specific data.
	Protein Conditioning Solution 2x Protein Inlet Buffer Protein Broad Range Gel P240 Broad Range Ladder 10x Protein Labeling Buffer	No specific data. No specific data. No specific data. No specific data. No specific data.
		No specific data.
<b>Skin contact</b>	: Protein Fluorescent Dye	No specific data.
	Dye Resuspension DMF	No specific data.
	Capillary Storage Solution	Adverse symptoms may include the following: irritation redness
	Protein Conditioning Solution 2x Protein Inlet Buffer Protein Broad Range Gel P240 Broad Range Ladder 10x Protein Labeling Buffer	No specific data. No specific data. No specific data. No specific data. No specific data.
		No specific data.
<b>Ingestion</b>	: Protein Fluorescent Dye	No specific data.
	Dye Resuspension DMF	No specific data.
	Capillary Storage Solution	No specific data.
	Protein Conditioning Solution 2x Protein Inlet Buffer Protein Broad Range Gel P240 Broad Range Ladder 10x Protein Labeling Buffer	No specific data. No specific data. No specific data. 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.

## Section 11. Toxicological information

### Potential chronic health effects

#### General

: Protein Fluorescent Dye

Dye Resuspension DMF  
Capillary Storage Solution

Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

No known significant effects or critical hazards. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

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.

#### Carcinogenicity

: Protein Fluorescent Dye

Dye Resuspension DMF

No known significant effects or critical hazards. May cause cancer. Risk of cancer depends on duration and level of exposure.

Capillary Storage Solution

No known significant effects or critical hazards.

Protein Conditioning Solution

No known significant effects or critical hazards.

2x Protein Inlet Buffer

No known significant effects or critical hazards.

Protein Broad Range Gel

No known significant effects or critical hazards.

P240 Broad Range Ladder

No known significant effects or critical hazards.

10x Protein Labeling Buffer

No known significant effects or critical hazards.

#### Mutagenicity

: Protein Fluorescent Dye

Dye Resuspension DMF

No known significant effects or critical hazards.

Capillary Storage Solution

No known significant effects or critical hazards.

Protein Conditioning Solution

No known significant effects or critical hazards.

2x Protein Inlet Buffer

No known significant effects or critical hazards.

Protein Broad Range Gel

No known significant effects or critical hazards.

P240 Broad Range Ladder

No known significant effects or critical hazards.

10x Protein Labeling Buffer

No known significant effects or critical hazards.

#### Reproductive toxicity

: Protein Fluorescent Dye

Dye Resuspension DMF

No known significant effects or critical hazards.

Capillary Storage Solution

No known significant effects or critical hazards.

Protein Conditioning Solution

No known significant effects or critical hazards.

2x Protein Inlet Buffer

No known significant effects or critical hazards.

Protein Broad Range Gel

No known significant effects or critical hazards.

P240 Broad Range Ladder

No known significant effects or critical hazards.

10x Protein Labeling Buffer

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)
<b>Dye Resuspension DMF</b> N,N-Dimethylformamide	4000	1500	N/A	N/A	N/A
<b>Capillary Storage Solution</b> Glycerol	12600	N/A	N/A	N/A	N/A
2-Methyl-2H-isothiazol-3-one	285.5	242	N/A	N/A	0.11
<b>2x Protein Inlet Buffer</b> Sodium dodecyl sulphate	1288	N/A	N/A	N/A	1.5
<b>Protein Broad Range Gel</b> Sodium dodecyl sulphate	1288	N/A	N/A	N/A	1.5

## Section 11. Toxicological information

<b>P240 Broad Range Ladder</b> Glycerol	12600	N/A	N/A	N/A	N/A
<b>10x Protein Labeling Buffer</b> 10x Protein Labeling Buffer	31813.6	N/A	N/A	N/A	37.0
Sodium dodecyl sulphate	1288	N/A	N/A	N/A	1.5

### Other information

: Dye Resuspension DMF  
Capillary Storage Solution

Adverse symptoms include the following: central nervous system depression, liver abnormalities.  
Adverse symptoms may include the following: May cause skin sensitization.

## Section 12. Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
<b>Dye Resuspension DMF</b> N,N-Dimethylformamide	Acute EC50 14.4 mg/l Fresh water Acute EC50 7100000 µg/l Fresh water Acute LC50 >100000 µg/l Marine water  Chronic NOEC 1500 mg/l Fresh water Chronic NOEC 0.1 ml/L Fresh water	Daphnia - <i>Daphnia magna</i> Fish - <i>Lepomis macrochirus</i> Crustaceans - <i>Crangon crangon</i> - Adult Daphnia - <i>Daphnia magna</i> Fish - <i>Oncorhynchus mykiss</i> - Embryo	48 hours 96 hours 48 hours 21 days 30 days
<b>Capillary Storage Solution</b> Glycerol 2-Methyl-2H-isothiazol-3-one	Acute LC50 54000 mg/l Fresh water Acute EC50 0.18 ppm Fresh water Acute LC50 0.07 ppm Fresh water Chronic NOEC 0.044 mg/l Fresh water Chronic NOEC 4.93 mg/l Fresh water	Fish - <i>Oncorhynchus mykiss</i> Daphnia - <i>Daphnia magna</i> Fish - <i>Oncorhynchus mykiss</i> Daphnia Fish	96 hours 48 hours 96 hours 21 days 98 days
<b>2x Protein Inlet Buffer</b> Trometamol  Sodium dodecyl sulphate	Acute EC50 >980 mg/l Fresh water Acute NOEC 520 mg/l Fresh water Acute EC50 1200 µg/l Marine water Acute LC50 900 µg/l Marine water  Acute LC50 1400 µg/l Fresh water  Acute LC50 590 µg/l Fresh water Chronic NOEC 1.25 mg/l Marine water Chronic NOEC 1 mg/l Fresh water  Chronic NOEC 3.2 mg/l Fresh water  Chronic NOEC 0.8 mg/l Fresh water	Daphnia Daphnia Algae - <i>Skeletonema costatum</i> Crustaceans - <i>Artemia salina</i> - Adult Daphnia - <i>Daphnia pulex</i> - Neonate Fish - <i>Cirrhinus mrigala</i> - Larvae Algae - <i>Ulva fasciata</i> - Zoea Crustaceans - <i>Pseudosida ramosa</i> - Neonate Daphnia - <i>Daphnia magna</i> - Neonate Fish - <i>Gambusia holbrooki</i>	48 hours 48 hours 96 hours 48 hours 48 hours 96 hours 96 hours 21 days 21 days 28 days
<b>Protein Broad Range Gel</b> Trometamol  Sodium dodecyl sulphate	Acute EC50 >980 mg/l Fresh water Acute NOEC 520 mg/l Fresh water Acute EC50 1200 µg/l Marine water Acute LC50 900 µg/l Marine water  Acute LC50 1400 µg/l Fresh water  Acute LC50 590 µg/l Fresh water	Daphnia Daphnia Algae - <i>Skeletonema costatum</i> Crustaceans - <i>Artemia salina</i> - Adult Daphnia - <i>Daphnia pulex</i> - Neonate Fish - <i>Cirrhinus mrigala</i> - Larvae	48 hours 48 hours 96 hours 48 hours 48 hours 96 hours



## Section 12. Ecological information

<b>P240 Broad Range Ladder</b> Glycerol  <b>10x Protein Labeling Buffer</b> Sodium dodecyl sulphate	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
	Acute LC50 54000 mg/l Fresh water	Fish - <i>Oncorhynchus mykiss</i>	96 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

### 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
<b>Capillary Storage Solution</b> Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
2-Methyl-2H-isothiazol-3-one	301D Ready Biodegradability - Closed Bottle Test	0 % - Not readily - 28 days	-	-
<b>2x Protein Inlet Buffer</b> Trometamol	OECD 301F Ready Biodegradability - Manometric Respirometry Test	97.1 % - Readily - 28 days	30 mg/l	-
Sodium dodecyl sulphate	OECD 301B Ready Biodegradability - CO <sub>2</sub> Evolution Test	95 % - Readily - 28 days	20 mg/l	-
<b>Protein Broad Range Gel</b> Trometamol	OECD 301F Ready Biodegradability - Manometric Respirometry Test	97.1 % - Readily - 28 days	30 mg/l	-
Sodium dodecyl sulphate	OECD 301B Ready	95 % - Readily - 28 days	20 mg/l	-

## Section 12. Ecological information

<b>P240 Broad Range Ladder</b> Glycerol	Biodegradability - CO <sub>2</sub> Evolution Test  301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
<b>10x Protein Labeling Buffer</b> Sodium dodecyl sulphate	OECD 301B Ready Biodegradability - CO <sub>2</sub> Evolution Test	95 % - Readily - 28 days	20 mg/l	-
Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability	
<b>Capillary Storage Solution</b> 2-Methyl-2H-isothiazol-3-one	-	-	Not readily	
<b>2x Protein Inlet Buffer</b> Trometamol	-	-	Readily	
Sodium dodecyl sulphate	-	-	Readily	
<b>Protein Broad Range Gel</b> Trometamol	-	-	Readily	
Sodium dodecyl sulphate	-	-	Readily	
<b>10x Protein Labeling Buffer</b> Sodium dodecyl sulphate	-	-	Readily	

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>Dye Resuspension DMF</b> N,N-Dimethylformamide	-1.01	0.79	Low
<b>Capillary Storage Solution</b> Glycerol	-1.76	-	Low
2-Methyl-2H-isothiazol-3-one	0.119	-	Low
<b>2x Protein Inlet Buffer</b> Trometamol	-2.31	-	Low
Sodium dodecyl sulphate	-2.03	-	Low
<b>Protein Broad Range Gel</b> Trometamol	-2.31	-	Low
Sodium dodecyl sulphate	-2.03	-	Low
<b>P240 Broad Range Ladder</b> Glycerol	-1.76	-	Low
<b>10x Protein Labeling Buffer</b> Sodium dodecyl sulphate	-2.03	-	Low

### 12.4 Mobility in soil

## Section 12. Ecological information

**Soil/water partition coefficient (K<sub>oc</sub>)** : 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. 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

	<b>DOT Classification</b>	<b>TDG Classification</b>	<b>Mexico Classification</b>	<b>IMDG</b>	<b>IATA</b>
<b>UN number</b>	UN3316	UN3316	UN3316	UN3316	UN3316
<b>UN proper shipping name</b>	Chemical kit	CHEMICAL KIT	EQUIPO QUIMICO	CHEMICAL KIT	Chemical kit
<b>Transport hazard class(es)</b>	9 	9 	9 	9 	9 
<b>Packing group</b>	III	III	III	III	III
<b>Environmental hazards</b>	No.	No.	No.	No.	No.

### Additional information

## Section 14. Transport information

- DOT Classification** : **Reportable quantity** 800 lbs / 363.2 kg. The classification of the product is due solely to the presence of one or more US DOT-listed 'Hazardous substances' that are subject to reportable quantity requirements and only applies to shipments of packages greater than, or equal to, the product reportable quantity. Package sizes less than the product reportable quantity are not regulated as hazardous materials.  
**Limited quantity** Yes.  
**Packaging instruction** Exceptions: 161. Non-bulk: 161. Bulk: None.  
**Quantity limitation** Passenger aircraft/rail: 10 kg. Cargo aircraft: 10 kg.  
**Special provisions** 15
- TDG Classification** : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.43-2.45 (Class 9).  
**Passenger Carrying Road or Rail Index** 10  
**Special provisions** 65, 141
- Mexico Classification** : **Special provisions** 251, 340
- IMDG** : **Emergency schedules** F-A, \_S-P\_  
**Special provisions** 251, 340
- IATA** : **Quantity limitation** Passenger and Cargo Aircraft: 10 kg. Packaging instructions: 960. Cargo Aircraft Only: 10 kg. Packaging instructions: 960. Limited Quantities - Passenger Aircraft: 1 kg. Packaging instructions: Y960.  
**Special provisions** A44, A163
- 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 5(a)2 proposed significant new use rules:** 2-Methyl-2H-isothiazol-3-one  
**TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**Clean Water Act (CWA) 311:** triethylamine; Edetic acid; Sodium hydroxide
- Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : 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** : 80000000 lbs / 36320000 kg
- SARA 311/312**

## Section 15. Regulatory information

### Classification

: Protein Fluorescent Dye  
Dye Resuspension DMF

COMBUSTIBLE DUSTS  
FLAMMABLE LIQUIDS - Category 3  
ACUTE TOXICITY (dermal) - Category 4  
EYE IRRITATION - Category 2A  
CARCINOGENICITY - Category 1B  
EYE IRRITATION - Category 2B  
SKIN SENSITIZATION - Category 1  
Not applicable.  
Not applicable.  
Not applicable.  
EYE IRRITATION - Category 2B  
Not applicable.

Capillary Storage Solution

Protein Conditioning Solution  
2x Protein Inlet Buffer  
Protein Broad Range Gel  
P240 Broad Range Ladder  
10x Protein Labeling Buffer

### Composition/information on ingredients

Name	%	Classification
<b>Dye Resuspension DMF</b> N,N-Dimethylformamide	100	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (dermal) - Category 4 EYE IRRITATION - Category 2A CARCINOGENICITY - Category 1B
<b>Capillary Storage Solution</b> Glycerol	≥50 - ≤75	EYE IRRITATION - Category 2B
<b>2x Protein Inlet Buffer</b> Trometamol	≤5	COMBUSTIBLE DUSTS SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
<b>Protein Broad Range Gel</b> Trometamol	≤3	COMBUSTIBLE DUSTS SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
<b>P240 Broad Range Ladder</b> Glycerol	≥10 - ≤25	EYE IRRITATION - Category 2B
<b>10x Protein Labeling Buffer</b> Sodium dodecyl sulphate	≤5	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

### SARA 313

	Product name	CAS number	%
<b>Form R - Reporting requirements</b>	<b>Dye Resuspension DMF</b> N,N-Dimethylformamide	68-12-2	100
<b>Supplier notification</b>	<b>Dye Resuspension DMF</b> N,N-Dimethylformamide	68-12-2	100

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### State regulations

**Massachusetts** : The following components are listed: DIMETHYLFORMAMIDE; GLYCERINE MIST  
**New York** : The following components are listed: Dimethyl formamide  
**New Jersey** : The following components are listed: DIMETHYLFORMAMIDE; GLYCERIN

## Section 15. Regulatory information

**Pennsylvania** : The following components are listed: FORMAMIDE, N,N-DIMETHYL-; 1,2,3-PROPANETRIOL

### California Prop. 65

**⚠ WARNING:** This product can expose you to N,N-Dimethylformamide, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

<b>Ingredient name</b>	<b>No significant risk level</b>	<b>Maximum acceptable dosage level</b>
<b>Dye Resuspension DMF</b> N,N-Dimethylformamide	-	-

### 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** : At least one component is not listed.  
**Viet Nam** : Not determined.

## Section 16. Other information

### Procedure used to derive the classification

## Section 16. Other information

Classification	Justification
<b>Protein Fluorescent Dye</b> COMBUSTIBLE DUSTS	On basis of test data
<b>Dye Resuspension DMF</b> FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (dermal) - Category 4 EYE IRRITATION - Category 2A CARCINOGENICITY - Category 1B	On basis of test data On basis of test data On basis of test data On basis of test data
<b>Capillary Storage Solution</b> EYE IRRITATION - Category 2B SKIN SENSITIZATION - Category 1	Calculation method Calculation method
<b>P240 Broad Range Ladder</b> EYE IRRITATION - Category 2B	Calculation method

### History

<b>Date of issue/Date of revision</b>	: 01/11/2024
<b>Date of previous issue</b>	: 11/29/2023
<b>Version</b>	: 2.1
<b>Key to abbreviations</b>	: 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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