

according to Regulation (EC) No 1907/2006 (REACH)

**Trade name: PhenoVue Neuronal Differentiation Staining Kit - 1 x 384 / PNDIF11**

Version: KIT, Page 1 of 1, Revision date: 15/12/2023

**Cette section présente les différents flacons présents dans le kit. Les fiches de sécurité de tous ces composants sont disponibles dans la langue choisie à la suite du document.**

**This section shows all the vials in the kit. The Safety Datasheets are available in the selected language in the next part of the document.**

### Nomenclature of the product

Description	Component	Nb of vials	pH	Color	Physical state
PhenoVue Fluor 488 - Rat anti Mouse-IgG1 Highly Cross-Adsorbed 50X 200 µL		1	7	Yellow	Liquid
PhenoVue Fluor 647 - Rat anti Mouse-IgG2a Highly Cross-Adsorbed 50X 200 µL		1	7	Blue	Liquid
PhenoVue Fluor 555 - Phalloidin (600X)		1	-	Pink	Solid
PhenoVue Hoechst 33342 - Nuclear stain 70 µL		1	3	Yellow	Liquid
PhenoVue anti-B3 Tubulin antibody - 100X 100 µL Unit		1	7	Colorless	Liquid
PhenoVue anti-Nestin antibody - 100X 100 µL Unit		1	7	Colorless	Liquid
PhenoVue dye diluent A (5X) - 8 mL		1	7	Colorless	Liquid
PhenoVue Permeabilization - 0,5% Triton Solution 25mL Unit		1	7	Colorless	Liquid
PhenoVue Paraformaldehyde - 4% Solution 25mL Unit		1	7	Colorless	Liquid

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 488 - Rat anti Mouse-IgG1 Highly Cross-Adsorbed 50X 200 µL

Version: US, Page 1 of 11, Revision date: 28/11/2023

## SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifier:

**Designation / Trade name: PhenoVue Fluor 488 - Rat anti Mouse-IgG1 Highly Cross-Adsorbed 50X 200 µL**

CAS No.:

Index No:

EC No:

REACH No:

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

Relevant identified uses: Use of the substance or mixture for Laboratory Research use only ;

Uses advised against: Do not use for diagnostics, therapeutics or other clinical uses. ;

### 1.3 Details of the supplier of the safety data sheet:

#### Supplier:

Name: CISBIO BIOASSAYS, company of Revvity Group - CBBIOA -

Address: Parc Marcel Boiteux - BP 84175 - 30200 Codolet, France

Phone : +33 4 66 79 67 05 - Fax : +33 4 66 79 67 50

E-Mail (competent person):  codolet.sds@revvity.com

### 1.4 EMERGENCY TELEPHONE NUMBER:

France - Numéro ORFILA (INRS) : + 33 (0)1 45 42 59 59

Ce numéro permet d'obtenir les coordonnées de tous les centres Anti-poison Français. Ces centres anti-poison et de toxicovigilance fournissent une aide médicale gratuite (hors coût d'appel), 24 heures sur 24 et 7 jours sur 7.

USA & Canada - Phone: 1-888-963-456 (1)

Other countries - Phone: +33 (0) 466 796 737 (2)

<https://www.cisbio.com>

<https://www.revvity.com>

(1) Available from Monday to Thursday 8:30 am to 5:30pm GMT-5 and Friday: 8:30 am to 3:00pm GMT-5

(2) Available from Monday to Friday 9:00 am to 5:30 pm GMT+2

## SECTION 2 : HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture:

Classification in accordance with 29 CFR 1910 (OSHA HCS)	Category code	Hazard statement	Precautionary statement
The substance or mixture is not classified as hazardous in accordance with 29 CFR 1910 (OSHA HCS)	None	None	None

### 2.2 Label elements

Labelling according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

#### Product identifier:

Designation / Trade name: PhenoVue Fluor 488 - Rat anti Mouse-IgG1 Highly Cross-Adsorbed 50X 200 µL

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 488 - Rat anti Mouse-IgG1 Highly Cross-Adsorbed 50X 200 µL

Version: US, Page 2 of 11, Revision date: 28/11/2023

---

Substances contained in this product:

Hazard pictograms

Signal word:

Hazard and precautionary statements:

### **2.3 Other hazards**

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC)  $\geq 0.1\%$  published by the European Chemicals Agency (ECHA) under article 57 of REACH. The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006. ;

Adverse human health effects:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 488 - Rat anti Mouse-IgG1 Highly Cross-Adsorbed 50X 200 µL

Version: US, Page 3 of 11, Revision date: 28/11/2023

## SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

#### Hazardous ingredients:

This mixture does not contain any hazardous substances at the concentration limits given in Regulation (EC) No. 1272/2008 and OSHA Hazard Communication Standard 29 CFR 1910.1200.

#### Additional information:

Full text of H- and EUH-phrases: see SECTION 16.

## SECTION 4 : FIRST AID MEASURES

### 4.1 Description of first aid measures

**General information:** Do not leave affected person unattended. ; Remove affected person from the danger area and lay down. ;

**Following inhalation:** In case of respiratory tract irritation, consult a physician. ; Provide fresh air. ;

**Following skin contact:**After contact with skin, wash immediately with water ; Remove contaminated clothing ;

**Following eye contact:** After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. ;

**Following ingestion:** Do NOT induce vomiting. ; Give nothing to eat or drink. ; If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. ;

**Self-protection of the first aider:**

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

Symptoms: No known symptoms to date. ;

Effects:

### 4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor:

## SECTION 5 : FIREFIGHTING MEASURES

### 5.1 Extinguishing media:

Suitable extinguishing media: This product is not flammable. Use extinguishing agent suitable for type of surrounding fire ;

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

Hazardous combustion products: /

### 5.3 Advice for fire-fighters

Wear Protective clothing. ;

Additional information:

## SECTION 6 : ACCIDENTAL RELEASE MEASURES

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

Emergency procedures: Provide adequate ventilation. ; Emergency procedures: Remove persons to safety. ; Personal precautions: Use personal protection equipment (see section 8). ;

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 488 - Rat anti Mouse-IgG1 Highly Cross-Adsorbed 50X 200 µL

Version: US, Page 4 of 11, Revision date: 28/11/2023

## 6.2 Environmental precautions

Do not allow to enter into surface water or drains. ; Ensure all waste water is collected and treated via a waste water treatment plant. ;

## 6.3 Methods and material for containment and cleaning up

For cleaning up: Suitable material for taking up: Absorbing material, organic ;

Other information:

## 6.4 Reference to other sections

Additional information:

# SECTION 7 : HANDLING AND STORAGE

## 7.1 Precautions for safe handling

Protective measures:

Advice on safe handling: Avoid contact with skin, eyes and clothes. ; Avoid: Eye contact ; Avoid: Generation/formation of aerosols ; Avoid: Skin contact ; Avoid: inhalation ; In the immediate working surroundings there must be: Emergency shower installed ; In the immediate working surroundings there must be: Provide eye shower and label its location conspicuously ; Wash contaminated clothing immediately. ;

Fire preventions:

Do not eat, drink or smoke in areas where reagents are handled. ; Do not pipet by mouth ; Wear suitable one-way gloves at work ;

Advice on general occupational hygiene: Handle in accordance with good industrial hygiene and safety practice ; Observe technical data sheet. ; Remove contaminated, saturated clothing. ; Wash hands before breaks and after work. ;

## 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels: Keep container tightly closed. ; Keep-store only in original container or in properly labeled containers ;

Hints on storage assembly:

Materials to avoid:

Further information on storage conditions:

## 7.3 Specific end uses:

Recommendations on specific end uses: Observe technical data sheet. ;

# SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control parameters

Preliminary remark:

### 8.1.1 Occupational exposure limits:

- OSHA (USA)

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 488 - Rat anti Mouse-IgG1 Highly Cross-Adsorbed 50X 200 µL

Version: US, Page 5 of 11, Revision date: 28/11/2023

8.1.2 DNEL/PNEC-values:

- DNEL worker
  
  
  
- DNEL consumer
  
  
  
- PNEC

**8.2 Exposure controls**

8.2.1 Appropriate engineering controls:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See section 7

8.2.2 Personal protective equipment:

Eye / Face protection: Safety glasses with side-shields ;

Skin protection:Gloves ; Laboratory coats ;

Respiratory protection:Ensure adequate ventilation ;

Thermal hazards:

8.2.3 Environmental exposure controls:

Consumer exposure control

Measures related to consumer uses of the substance (as such or in mixtures):

Measures related to the service life of the substance in articles:

**SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties**

Appearance

Physical state	Liquid ;
Colour	Yellow ;
Odour	
Odour threshold (ppm)	

	Value	Concentration (mol/L)	Method	Temperature (°C)	Pressure (kPa)	Remark
pH	7					
Melting point (°C)						
Freezing point (°C)						
Initial boiling point/boiling range (°C)						
Flash point (°C)						
Evaporation rate (kg/m <sup>2</sup> /h)						
Flammability (type : ) (%)						
Upper/lower flammability or explosive limits	Upper explosive limit (%)					
	Lower explosive limit (%)					
Vapour pressure (kPa)						
Vapour density (g/cm <sup>3</sup> )						
	Density (g/cm <sup>3</sup> )					

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 488 - Rat anti Mouse-IgG1 Highly Cross-Adsorbed 50X 200 µL

Version: US, Page 6 of 11, Revision date: 28/11/2023

Densities	Relative density (g/cm <sup>3</sup> )					
	Bulk density (g/cm <sup>3</sup> )					
	Critical density (g/cm <sup>3</sup> )					
Solubility (Type : ) (g/L)						
Partition coefficient (log Pow) n-octanol/water at pH :						
Auto-ignition temperature (°C)						
Decomposition temperature (°C) Decomposition energy : kJ						
Viscosity	Viscosity, dynamic (poiseuille)					
	Viscosity, cinematic (cm <sup>2</sup> /s)					
Explosive properties						
Oxidising properties						

**9.2 Other information:**

No other relevant data available

**SECTION 10 : STABILITY AND REACTIVITY**

**10.1 Reactivity**

This material is considered to be non-reactive under normal use conditions. ;

**10.2 Chemical stability**

**10.3 Possibility of hazardous reactions**

**10.4 Conditions to avoid:**

**10.5 Incompatible materials:**

**10.6 Hazardous decomposition products:**

Does not decompose when used for intended uses. ; Thermal decomposition can lead to the escape of irritating gases and vapors. ;

**SECTION 11 : TOXICOLOGICAL INFORMATION**

Toxicokinetics, metabolism and distribution

**11.1 Information on toxicological effects**

Substances

- **Acute toxicity**

Animal data:

Acute oral toxicity:

Acute dermal toxicity:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 488 - Rat anti Mouse-IgG1 Highly Cross-Adsorbed 50X 200 µL

Version: US, Page 7 of 11, Revision date: 28/11/2023

---

Acute inhalative toxicity:

Practical experience / human evidence:

Assessment / Classification:

General Remark:

- **Skin corrosion/irritation**

Animal data:

In-vitro skin test method:

In-vitro skin test result:

Assessment / Classification:

- **Eye damage/irritation**

Animal data:

In vitro eye test method:

In vitro eye test result:

Assessment / Classification:

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
  - Germ cell mutagenicity:

Animal data:

Assessment / Classification:

- Carcinogenicity

Practical experience / human evidence:

Animal data:

Other information:

Assessment / Classification:

- Reproductive toxicity

Practical experience / human evidence:

Animal data:

Other information:

Assessment / Classification:

Overall assessment on CMR properties:



according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 488 - Rat anti Mouse-IgG1 Highly Cross-Adsorbed 50X 200 µL

Version: US, Page 8 of 11, Revision date: 28/11/2023

- **Specific target organ toxicity (single exposure)**
  - STOT SE 1 and 2

Animal data:

Other information:

- STOT SE 3

Practical experience / human evidence:

Other information:

Assessment / Classification:

- **Specific target organ toxicity (repeated exposure)**

Practical experience / human evidence:

Animal data:

Assessment / Classification:

Other information

- **Aspiration hazard**

Practical experience / human evidence:

Experimental data: viscosity data: see SECTION 9.

Assessment / Classification:

Remark:

#### 11.1.1 Mixtures

No toxicological information is available for the mixture itself

## SECTION 12 : ECOLOGICAL INFORMATION

In case that test data regarding one endpoint/differentiation exist for the mixture itself, the classification is carried out according to the substance criteria (excluding biodegradation and bioaccumulation). If no test data exist, the criteria for mixture classification has to be used (calculation method); in this case the toxicological data of the ingredients are shown.

### 12.1 **Aquatic toxicity:**

Acute (short-term) fish toxicity

Chronic (long-term) fish toxicity

Acute (short-term) toxicity to crustacea

Chronic (long-term) toxicity to crustacea

Acute (short-term) toxicity to algae and cyanobacteria

Toxicity to microorganisms and other aquatic plants / organisms

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 488 - Rat anti Mouse-IgG1 Highly Cross-Adsorbed 50X 200 µL  
 Version: US, Page 9 of 11, Revision date: 28/11/2023

Assessment / Classification:

**12.2 Persistence and degradability**

Biodegradation:

Abiotic Degradation:

Assessment / Classification:

**12.3 Bioaccumulative potential**

Bioconcentration factor (BCF):

**12.4 Mobility in soil**

**12.5 Results of PBT and vPvB assessment**

**12.6 Other adverse effects:**

Additional ecotoxicological information:

**SECTION 13 : DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods**

Waste treatment options:  
 Dispose of waste according to applicable legislation. ;

Other disposal recommendations:

Additional information:

**SECTION 14 : TRANSPORT INFORMATION**

ADR/RID/AND/IMDG/IATA

UN No.	
UN Proper shipping name	
Transport hazard class(es)	
Hazard label(s)	
Packing group	

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Land transport (ADR/RID)

Classification code ADR:	Special Provisions for ADR/RID:
Limited quantities for ADR/RID:	Excepted Quantities for ADR/RID:
Packing Instructions for ADR/RID:	
Special packing provisions for ADR/RID:	
Mixed packing provisions:	Portable tanks and bulk containers Instructions:
Portable tanks and bulk containers Special Provisions:	
ADR Tank Code:	ADR Tank special provisions:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 488 - Rat anti Mouse-IgG1 Highly Cross-Adsorbed 50X 200 µL

Version: US, Page 10 of 11, Revision date: 28/11/2023

Vehicle for tank carriage: Special provisions for carriage Packages:  
Special provisions for carriage Bulk:  
Special provisions for carriage for loading, unloading and handling:  
Special Provisions for carriage Operation:  
Hazard identification No: Transport category (Tunnel restriction code):

#### Sea transport (IMDG)

Marine Pollutant: Subsidiary risk(s) for IMDG:  
Packing provisions for IMDG: Limited quantities for IMDG:  
Packing instructions for IMDG: IBC Instructions:  
IBC Provisions: IMO tank instructions:  
UN tank instructions: Tanks and bulk Provisions:  
EmS : Stowage and segregation for IMDG:  
Properties and observations:

#### Inland waterway transport (ADN)

Classification Code ADN: Special Provisions ADN:  
Limited quantities ADN: Excepted quantities ADN:  
Carriage permitted: Equipment required:  
Provisions concerning loading and unloading:  
Provisions concerning carriage: Number of blue cones/lights:  
Remark:

#### Air transport (ICAO-TI / IATA-DGR)

Subsidiary risk for IATA: Excepted quantity for IATA:  
Passenger and Cargo Aircraft Limited Quantities Packing Instructions:  
Passenger and Cargo Aircraft Limited Quantities Maximal Net Quantity :  
Passenger and Cargo Aircraft Packaging Instructions :  
Passenger and Cargo Aircraft Maximal Net Quantity :  
Cargo Aircraft only Packaging Instructions :  
Cargo Aircraft only Maximal Net Quantity :  
ERG code: Special Provisions for IATA:

## SECTION 15 : REGULATORY INFORMATION

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

### **15.2 Chemical Safety Assessment:**

For the following substances of this mixture a chemical safety assessment has been carried out :

## SECTION 16 : OTHER INFORMATION

### **16.1 Indication of changes**

Date of the previous version:09/11/2023

Modifications:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 488 - Rat anti Mouse-IgG1 Highly Cross-Adsorbed 50X 200 µL

Version: US, Page 11 of 11, Revision date: 28/11/2023

---

**16.2 Abbreviations and acronyms:**

**16.3 Key literature references and sources for data**

**16.4 Classification for mixtures and used evaluation method according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g):**

See SECTION 2.1 (classification).

**16.5 Relevant R-, H- and EUH-phrases (number and full text):**

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 647 - Rat anti Mouse-IgG2a Highly Cross-Adsorbed 50X 200 µL

Version: US, Page 1 of 11, Revision date: 28/11/2023

## SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifier:

**Designation / Trade name: PhenoVue Fluor 647 - Rat anti Mouse-IgG2a Highly Cross-Adsorbed 50X 200 µL**

CAS No.:

Index No:

EC No:

REACH No:

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

Relevant identified uses: Use of the substance or mixture for Laboratory Research use only ;

Uses advised against: Do not use for diagnostics, therapeutics or other clinical uses. ;

### 1.3 Details of the supplier of the safety data sheet:

#### Supplier:

Name: CISBIO BIOASSAYS, company of Revvity Group - CBBIOA -

Address: Parc Marcel Boiteux - BP 84175 - 30200 Codolet, France

Phone : +33 4 66 79 67 05 - Fax : +33 4 66 79 67 50

E-Mail (competent person):  codolet.sds@revvity.com

### 1.4 EMERGENCY TELEPHONE NUMBER:

France - Numéro ORFILA (INRS) : + 33 (0)1 45 42 59 59

Ce numéro permet d'obtenir les coordonnées de tous les centres Anti-poison Français. Ces centres anti-poison et de toxicovigilance fournissent une aide médicale gratuite (hors coût d'appel), 24 heures sur 24 et 7 jours sur 7.

USA & Canada - Phone: 1-888-963-456 (1)

Other countries - Phone: +33 (0) 466 796 737 (2)

<https://www.cisbio.com>

<https://www.revvity.com>

(1) Available from Monday to Thursday 8:30 am to 5:30pm GMT-5 and Friday: 8:30 am to 3:00pm GMT-5

(2) Available from Monday to Friday 9:00 am to 5:30 pm GMT+2

## SECTION 2 : HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture:

Classification in accordance with 29 CFR 1910 (OSHA HCS)	Category code	Hazard statement	Precautionary statement
The substance or mixture is not classified as hazardous in accordance with 29 CFR 1910 (OSHA HCS)	None	None	None

### 2.2 Label elements

Labelling according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

#### Product identifier:

Designation / Trade name: PhenoVue Fluor 647 - Rat anti Mouse-IgG2a Highly Cross-Adsorbed 50X 200 µL

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 647 - Rat anti Mouse-IgG2a Highly Cross-Adsorbed 50X 200 µL

Version: US, Page 2 of 11, Revision date: 28/11/2023

---

Substances contained in this product:

Hazard pictograms

Signal word:

Hazard and precautionary statements:

### **2.3 Other hazards**

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC)  $\geq 0.1\%$  published by the European Chemicals Agency (ECHA) under article 57 of REACH. The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006. ;

Adverse human health effects:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 647 - Rat anti Mouse-IgG2a Highly Cross-Adsorbed 50X 200 µL

Version: US, Page 3 of 11, Revision date: 28/11/2023

## SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

#### Hazardous ingredients:

This mixture does not contain any hazardous substances at the concentration limits given in Regulation (EC) No. 1272/2008 and OSHA Hazard Communication Standard 29 CFR 1910.1200.

#### Additional information:

Full text of H- and EUH-phrases: see SECTION 16.

## SECTION 4 : FIRST AID MEASURES

### 4.1 Description of first aid measures

**General information:** Do not leave affected person unattended. ; Remove affected person from the danger area and lay down. ;

**Following inhalation:** In case of respiratory tract irritation, consult a physician. ; Provide fresh air. ;

**Following skin contact:**After contact with skin, wash immediately with water ; Remove contaminated clothing ;

**Following eye contact:** After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. ;

**Following ingestion:** Do NOT induce vomiting. ; Give nothing to eat or drink. ; If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. ;

**Self-protection of the first aider:**

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

Symptoms: No known symptoms to date. ;

Effects:

### 4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor:

## SECTION 5 : FIREFIGHTING MEASURES

### 5.1 Extinguishing media:

Suitable extinguishing media: This product is not flammable. Use extinguishing agent suitable for type of surrounding fire ;

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

Hazardous combustion products: /

### 5.3 Advice for fire-fighters

Wear Protective clothing. ;

Additional information:

## SECTION 6 : ACCIDENTAL RELEASE MEASURES

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

Emergency procedures: Provide adequate ventilation. ; Emergency procedures: Remove persons to safety. ; Personal precautions: Use personal protection equipment (see section 8). ;

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 647 - Rat anti Mouse-IgG2a Highly Cross-Adsorbed 50X 200 µL

Version: US, Page 4 of 11, Revision date: 28/11/2023

## 6.2 Environmental precautions

Do not allow to enter into surface water or drains. ; Ensure all waste water is collected and treated via a waste water treatment plant. ;

## 6.3 Methods and material for containment and cleaning up

For cleaning up: Suitable material for taking up: Absorbing material, organic ;

Other information:

## 6.4 Reference to other sections

Additional information:

# SECTION 7 : HANDLING AND STORAGE

## 7.1 Precautions for safe handling

Protective measures:

Advice on safe handling: Avoid contact with skin, eyes and clothes. ; Avoid: Eye contact ; Avoid: Generation/formation of aerosols ; Avoid: Skin contact ; Avoid: inhalation ; In the immediate working surroundings there must be: Emergency shower installed ; In the immediate working surroundings there must be: Provide eye shower and label its location conspicuously ; Wash contaminated clothing immediately. ;

Fire preventions:

Do not eat, drink or smoke in areas where reagents are handled. ; Do not pipet by mouth ; Wear suitable one-way gloves at work ;

Advice on general occupational hygiene: Handle in accordance with good industrial hygiene and safety practice ; Observe technical data sheet. ; Remove contaminated, saturated clothing. ; Wash hands before breaks and after work. ;

## 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels: Keep container tightly closed. ; Keep-store only in original container or in properly labeled containers ;

Hints on storage assembly:

Materials to avoid:

Further information on storage conditions:

## 7.3 Specific end uses:

Recommendations on specific end uses: Observe technical data sheet. ;

# SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control parameters

Preliminary remark:

### 8.1.1 Occupational exposure limits:

- OSHA (USA)



according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 647 - Rat anti Mouse-IgG2a Highly Cross-Adsorbed 50X 200 µL

Version: US, Page 5 of 11, Revision date: 28/11/2023

8.1.2 DNEL/PNEC-values:

- DNEL worker
  
  
  
- DNEL consumer
  
  
  
- PNEC

**8.2 Exposure controls**

8.2.1 Appropriate engineering controls:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See section 7

8.2.2 Personal protective equipment:

Eye / Face protection: Safety glasses with side-shields ;

Skin protection:Gloves ; Laboratory coats ;

Respiratory protection:Ensure adequate ventilation ;

Thermal hazards:

8.2.3 Environmental exposure controls:

Consumer exposure control

Measures related to consumer uses of the substance (as such or in mixtures):

Measures related to the service life of the substance in articles:

**SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties**

Appearance

Physical state	Liquid ;
Colour	Blue ;
Odour	
Odour threshold (ppm)	

	Value	Concentration (mol/L)	Method	Temperature (°C)	Pressure (kPa)	Remark
pH	7					
Melting point (°C)						
Freezing point (°C)						
Initial boiling point/boiling range (°C)						
Flash point (°C)						
Evaporation rate (kg/m <sup>2</sup> /h)						
Flammability (type : ) (%)						
Upper/lower flammability or explosive limits	Upper explosive limit (%)					
	Lower explosive limit (%)					
Vapour pressure (kPa)						
Vapour density (g/cm <sup>3</sup> )						
	Density (g/cm <sup>3</sup> )					

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 647 - Rat anti Mouse-IgG2a Highly Cross-Adsorbed 50X 200 µL

Version: US, Page 6 of 11, Revision date: 28/11/2023

Densities	Relative density (g/cm <sup>3</sup> )					
	Bulk density (g/cm <sup>3</sup> )					
	Critical density (g/cm <sup>3</sup> )					
Solubility (Type : ) (g/L)						
Partition coefficient (log Pow) n-octanol/water at pH :						
Auto-ignition temperature (°C)						
Decomposition temperature (°C) Decomposition energy : kJ						
Viscosity	Viscosity, dynamic (poiseuille)					
	Viscosity, cinematic (cm <sup>2</sup> /s)					
Explosive properties						
Oxidising properties						

### 9.2 Other information:

No other relevant data available

## SECTION 10 : STABILITY AND REACTIVITY

### 10.1 Reactivity

This material is considered to be non-reactive under normal use conditions. ;

### 10.2 Chemical stability

### 10.3 Possibility of hazardous reactions

### 10.4 Conditions to avoid:

### 10.5 Incompatible materials:

### 10.6 Hazardous decomposition products:

Does not decompose when used for intended uses. ; Thermal decomposition can lead to the escape of irritating gases and vapors. ;

## SECTION 11 : TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution

### 11.1 Information on toxicological effects

#### Substances

- **Acute toxicity**

#### Animal data:

Acute oral toxicity:

Acute dermal toxicity:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 647 - Rat anti Mouse-IgG2a Highly Cross-Adsorbed 50X 200 µL

Version: US, Page 7 of 11, Revision date: 28/11/2023

---

Acute inhalative toxicity:

Practical experience / human evidence:

Assessment / Classification:

General Remark:

- **Skin corrosion/irritation**

Animal data:

In-vitro skin test method:

In-vitro skin test result:

Assessment / Classification:

- **Eye damage/irritation**

Animal data:

In vitro eye test method:

In vitro eye test result:

Assessment / Classification:

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
  - Germ cell mutagenicity:

Animal data:

Assessment / Classification:

- Carcinogenicity

Practical experience / human evidence:

Animal data:

Other information:

Assessment / Classification:

- Reproductive toxicity

Practical experience / human evidence:

Animal data:

Other information:

Assessment / Classification:

Overall assessment on CMR properties:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 647 - Rat anti Mouse-IgG2a Highly Cross-Adsorbed 50X 200 µL

Version: US, Page 8 of 11, Revision date: 28/11/2023

- **Specific target organ toxicity (single exposure)**
  - STOT SE 1 and 2

Animal data:

Other information:

- STOT SE 3

Practical experience / human evidence:

Other information:

Assessment / Classification:

- **Specific target organ toxicity (repeated exposure)**

Practical experience / human evidence:

Animal data:

Assessment / Classification:

Other information

- **Aspiration hazard**

Practical experience / human evidence:

Experimental data: viscosity data: see SECTION 9.

Assessment / Classification:

Remark:

#### 11.1.1 Mixtures

No toxicological information is available for the mixture itself

## SECTION 12 : ECOLOGICAL INFORMATION

In case that test data regarding one endpoint/differentiation exist for the mixture itself, the classification is carried out according to the substance criteria (excluding biodegradation and bioaccumulation). If no test data exist, the criteria for mixture classification has to be used (calculation method); in this case the toxicological data of the ingredients are shown.

### 12.1 **Aquatic toxicity:**

Acute (short-term) fish toxicity

Chronic (long-term) fish toxicity

Acute (short-term) toxicity to crustacea

Chronic (long-term) toxicity to crustacea

Acute (short-term) toxicity to algae and cyanobacteria

Toxicity to microorganisms and other aquatic plants / organisms

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 647 - Rat anti Mouse-IgG2a Highly Cross-Adsorbed 50X 200 µL

Version: US, Page 9 of 11, Revision date: 28/11/2023

Assessment / Classification:

**12.2 Persistence and degradability**

Biodegradation:

Abiotic Degradation:

Assessment / Classification:

**12.3 Bioaccumulative potential**

Bioconcentration factor (BCF):

**12.4 Mobility in soil**

**12.5 Results of PBT and vPvB assessment**

**12.6 Other adverse effects:**

Additional ecotoxicological information:

**SECTION 13 : DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods**

Waste treatment options:

Dispose of waste according to applicable legislation. ;

Other disposal recommendations:

Additional information:

**SECTION 14 : TRANSPORT INFORMATION**

ADR/RID/AND/IMDG/IATA

UN No.	
UN Proper shipping name	
Transport hazard class(es)	
Hazard label(s)	
Packing group	

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Land transport (ADR/RID)

Classification code ADR:

Special Provisions for ADR/RID:

Limited quantities for ADR/RID:

Excepted Quantities for ADR/RID:

Packing Instructions for ADR/RID:

Special packing provisions for ADR/RID:

Mixed packing provisions:

Portable tanks and bulk containers Instructions:

Portable tanks and bulk containers Special Provisions:

ADR Tank Code:

ADR Tank special provisions:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 647 - Rat anti Mouse-IgG2a Highly Cross-Adsorbed 50X 200 µL

Version: US, Page 10 of 11, Revision date: 28/11/2023

Vehicle for tank carriage: Special provisions for carriage Packages:  
 Special provisions for carriage Bulk:  
 Special provisions for carriage for loading, unloading and handling:  
 Special Provisions for carriage Operation:  
 Hazard identification No: Transport category (Tunnel restriction code):

#### Sea transport (IMDG)

Marine Pollutant: Subsidiary risk(s) for IMDG:  
 Packing provisions for IMDG: Limited quantities for IMDG:  
 Packing instructions for IMDG: IBC Instructions:  
 IBC Provisions: IMO tank instructions:  
 UN tank instructions: Tanks and bulk Provisions:  
 EmS : Stowage and segregation for IMDG:  
 Properties and observations:

#### Inland waterway transport (ADN)

Classification Code ADN: Special Provisions ADN:  
 Limited quantities ADN: Excepted quantities ADN:  
 Carriage permitted: Equipment required:  
 Provisions concerning loading and unloading:  
 Provisions concerning carriage: Number of blue cones/lights:  
 Remark:

#### Air transport (ICAO-TI / IATA-DGR)

Subsidiary risk for IATA: Excepted quantity for IATA:  
 Passenger and Cargo Aircraft Limited Quantities Packing Instructions:  
 Passenger and Cargo Aircraft Limited Quantities Maximal Net Quantity :  
 Passenger and Cargo Aircraft Packaging Instructions :  
 Passenger and Cargo Aircraft Maximal Net Quantity :  
 Cargo Aircraft only Packaging Instructions :  
 Cargo Aircraft only Maximal Net Quantity :  
 ERG code: Special Provisions for IATA:

## SECTION 15 : REGULATORY INFORMATION

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

### 15.2 Chemical Safety Assessment:

For the following substances of this mixture a chemical safety assessment has been carried out :

## SECTION 16 : OTHER INFORMATION

### 16.1 Indication of changes

Date of the previous version:09/11/2023

Modifications:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 647 - Rat anti Mouse-IgG2a Highly Cross-Adsorbed 50X 200 µL

Version: US, Page 11 of 11, Revision date: 28/11/2023

---

**16.2 Abbreviations and acronyms:**

**16.3 Key literature references and sources for data**

**16.4 Classification for mixtures and used evaluation method according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g):**

See SECTION 2.1 (classification).

**16.5 Relevant R-, H- and EUH-phrases (number and full text):**

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 555 - Phalloidin (600X)

Version: US, Page 1 of 12, Revision date: 13/10/2023

## SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifier:

**Designation / Trade name: PhenoVue Fluor 555 - Phalloidin (600X)**

CAS No.:

Index No:

EC No:

REACH No:

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

Relevant identified uses: Use of the substance or mixture for Laboratory Research use only ;

Uses advised against: Do not use for diagnostics, therapeutics or other clinical uses. ;

### 1.3 Details of the supplier of the safety data sheet:

#### Supplier:

Name: CISBIO BIOASSAYS, company of Revvity Group - CBBIOA -

Address: Parc Marcel Boiteux - BP 84175 - 30200 Codolet, France

Phone : +33 4 66 79 67 05 - Fax : +33 4 66 79 67 50

E-Mail (competent person):  codolet.sds@revvity.com

### 1.4 EMERGENCY TELEPHONE NUMBER:

France - Numéro ORFILA (INRS) : + 33 (0)1 45 42 59 59

Ce numéro permet d'obtenir les coordonnées de tous les centres Anti-poison Français. Ces centres anti-poison et de toxicovigilance fournissent une aide médicale gratuite (hors coût d'appel), 24 heures sur 24 et 7 jours sur 7.

USA & Canada - Phone: 1-888-963-456 (1)

Other countries - Phone: +33 (0) 466 796 737 (2)

<https://www.cisbio.com>

<https://www.revvity.com>

(1) Available from Monday to Thursday 8:30 am to 5:30pm GMT-5 and Friday: 8:30 am to 3:00pm GMT-5

(2) Available from Monday to Friday 9:00 am to 5:30 pm GMT+2

## SECTION 2 : HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture:

Classification in accordance with 29 CFR 1910 (OSHA HCS)	Category code	Hazard statement	Precautionary statement
Acute toxicity - Acute Tox. 2 - H300 - Oral	Acute Tox. 2	H300	P264 P270 P301 + P310 P321 P330 P405 P501
Acute toxicity - Acute Tox. 2 - H310 - Dermal	Acute Tox. 2	H310	P262 P264 P270 P280 P302 + P352 P310 P321 P405 P501
Acute toxicity - Acute Tox. 2 - H330 - Inhalation	Acute Tox. 2	H330	P260 P271 P284 P304 + P340 P310 P320 P403 + P233 P405 P501



according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 555 - Phalloidin (600X)

Version: US, Page 2 of 12, Revision date: 13/10/2023

## 2.2 Label elements

Labelling according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

### Product identifier:

Designation / Trade name: PhenoVue Fluor 555 - Phalloidin (600X)

Substances contained in this product:

Substance name	CAS n°	Index n°	EC n°
Phalloidin	87876-22-0		

### Hazard pictograms

GHS06-skull



### Signal word:

Danger

### Hazard and precautionary statements:

Code	Hazard statments
H300	Fatal if swallowed
H310	Fatal in contact with skin
H330	Fatal if inhaled
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P262	Do not get in eyes, on skin, or on clothing.
P264	Wash ... thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	[In case of inadequate ventilation] wear respiratory protection.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/...
P302 + P352	IF ON SKIN: Wash with plenty of water/...
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310	Immediately call a POISON CENTER/doctor/...
P320	Specific treatment is urgent (see ... on this label).
P321	Specific treatment (see ... on this label).
P330	Rinse mouth.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container to ...

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 555 - Phalloidin (600X)

Version: US, Page 3 of 12, Revision date: 13/10/2023

---

### **2.3 Other hazards**

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC)  $\geq 0.1\%$  published by the European Chemicals Agency (ECHA) under article 57 of REACH. The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006. ;

Adverse human health effects:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 555 - Phalloidin (600X)

Version: US, Page 4 of 12, Revision date: 13/10/2023

## SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

Hazardous ingredients:

Substance name	CAS n°	Index n°	EC n°	Classification in accordance with 29 CFR 1910 (OSHA HCS)	Concentration (%)	SCL	M-factor
Phalloidin	87876-22-0			Acute toxicity - Acute Tox. 2 - H300 - Oral Acute toxicity - Acute Tox. 2 - H310 - Dermal Acute toxicity - Acute Tox. 2 - H330 - Inhalation	≤ 100%		

Additional information:

Full text of H- and EUH-phrases: see SECTION 16.

## SECTION 4 : FIRST AID MEASURES

### 4.1 Description of first aid measures

**General information:** Do not leave affected person unattended. ;

**Following inhalation:** In case of respiratory tract irritation, consult a physician. ;

**Following skin contact:** After contact with skin, wash immediately with water ;

**Following eye contact:** After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. ;

**Following ingestion:** Do NOT induce vomiting. ;

**Self-protection of the first aider:**

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

Symptoms: No known symptoms to date. ;

Effects:

### 4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor:

## SECTION 5 : FIREFIGHTING MEASURES

### 5.1 Extinguishing media:

Suitable extinguishing media: This product is not flammable. Use extinguishing agent suitable for type of surrounding fire ;

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

Hazardous combustion products: /

### 5.3 Advice for fire-fighters

Wear Protective clothing. ;

Additional information:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 555 - Phalloidin (600X)

Version: US, Page 5 of 12, Revision date: 13/10/2023

## SECTION 6 : ACCIDENTAL RELEASE MEASURES

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

Emergency procedures: Provide adequate ventilation. ;

### 6.2 *Environmental precautions*

Do not allow to enter into surface water or drains. ;

### 6.3 *Methods and material for containment and cleaning up*

For cleaning up: Suitable material for taking up: Absorbing material, organic ;

Other information:

### 6.4 *Reference to other sections*

Additional information:

## SECTION 7 : HANDLING AND STORAGE

### 7.1 *Precautions for safe handling*

Protective measures:

Advice on safe handling: Avoid contact with skin, eyes and clothes. ;

Fire preventions:

Do not eat, drink or smoke in areas where reagents are handled. ;

Advice on general occupational hygiene : Handle in accordance with good industrial hygiene and safety practice ;

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

Requirements for storage rooms and vessels: Keep container tightly closed. ;

Hints on storage assembly:

Materials to avoid:

Further information on storage conditions:

### 7.3 *Specific end uses:*

Recommendations on specific end uses: Observe technical data sheet. ;

## SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 *Control parameters*

Preliminary remark:

#### 8.1.1 Occupational exposure limits:

- OSHA (USA)

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 555 - Phalloidin (600X)

Version: US, Page 6 of 12, Revision date: 13/10/2023

8.1.2 DNEL/PNEC-values:

- DNEL worker
  
  
  
- DNEL consumer
  
  
  
- PNEC

**8.2 Exposure controls**

8.2.1 Appropriate engineering controls:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See section 7

8.2.2 Personal protective equipment:

Eye / Face protection: Safety glasses with side-shields ;

Skin protection:Gloves ;

Respiratory protection:Ensure adequate ventilation ;

Thermal hazards:

8.2.3 Environmental exposure controls:

Consumer exposure control

Measures related to consumer uses of the substance (as such or in mixtures):

Measures related to the service life of the substance in articles:

**SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties**

Appearance

Physical state	Solid ;
Colour	Pink ;
Odour	
Odour threshold (ppm)	

	Value	Concentration (mol/L)	Method	Temperature (°C)	Pressure (kPa)	Remark
pH						
Melting point (°C)						
Freezing point (°C)						
Initial boiling point/boiling range (°C)						
Flash point (°C)						
Evaporation rate (kg/m <sup>2</sup> /h)						
Flammability (type : ) (%)						
Upper/lower flammability or explosive limits	Upper explosive limit (%)					
	Lower explosive limit (%)					
Vapour pressure (kPa)						
Vapour density (g/cm <sup>3</sup> )						
Densities	Density (g/cm <sup>3</sup> )					
	Relative density (g/cm <sup>3</sup> )					

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 555 - Phalloidin (600X)

Version: US, Page 7 of 12, Revision date: 13/10/2023

	Bulk density (g/cm <sup>3</sup> )						
	Critical density (g/cm <sup>3</sup> )						
Solubility (Type : ) (g/L)							
Partition coefficient (log Pow) n-octanol/water at pH :							
Auto-ignition temperature (°C)							
Decomposition temperature (°C) Decomposition energy : kJ							
Viscosity	Viscosity, dynamic (poiseuille)						
	Viscosity, cinematic (cm <sup>2</sup> /s)						
Explosive properties							
Oxidising properties							

**9.2 Other information:**

No other relevant data available

**SECTION 10 : STABILITY AND REACTIVITY**

**10.1 Reactivity**

This material is considered to be non-reactive under normal use conditions. ;

**10.2 Chemical stability**

**10.3 Possibility of hazardous reactions**

**10.4 Conditions to avoid:**

**10.5 Incompatible materials:**

**10.6 Hazardous decomposition products:**

Does not decompose when used for intended uses. ;

**SECTION 11 : TOXICOLOGICAL INFORMATION**

Toxicokinetics, metabolism and distribution

**11.1 Information on toxicological effects**

Substances

- **Acute toxicity**

Animal data:

Acute oral toxicity:

Substance name	LD50 (mg/kg)	Species	Method	Symptoms / delayed effects	Remark
87876-22-0					

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 555 - Phalloidin (600X)

Version: US, Page 8 of 12, Revision date: 13/10/2023

Acute dermal toxicity:

Substance name	LD50 (mg/kg)	Species	Method	Remark
87876-22-0				

Acute inhalative toxicity:

Substance name	C(E)L50 (mg/L)	Exposure time	Species	Method	Remark
87876-22-0					

Practical experience / human evidence:

Assessment / Classification:

General Remark:

- **Skin corrosion/irritation**

Animal data:

In-vitro skin test method:

In-vitro skin test result:

Assessment / Classification:

- **Eye damage/irritation**

Animal data:

In vitro eye test method:

In vitro eye test result:

Assessment / Classification:

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
  - Germ cell mutagenicity:

Animal data:

Assessment / Classification:

- Carcinogenicity

Practical experience / human evidence:

Animal data:

Other information:

Assessment / Classification:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 555 - Phalloidin (600X)

Version: US, Page 9 of 12, Revision date: 13/10/2023

- Reproductive toxicity

Practical experience / human evidence:

Animal data:

Other information:

Assessment / Classification:

Overall assessment on CMR properties:

- **Specific target organ toxicity (single exposure)**
  - STOT SE 1 and 2

Animal data:

Other information:

- STOT SE 3

Practical experience / human evidence:

Other information:

Assessment / Classification:

- **Specific target organ toxicity (repeated exposure)**

Practical experience / human evidence:

Animal data:

Assessment / Classification:

Other information

- **Aspiration hazard**

Practical experience / human evidence:

Experimental data: viscosity data: see SECTION 9.

Assessment / Classification:

Remark:

#### 11.1.1 Mixtures

No toxicological information is available for the mixture itself

## SECTION 12 : ECOLOGICAL INFORMATION

In case that test data regarding one endpoint/differentiation exist for the mixture itself, the classification is carried out according to the substance criteria (excluding biodegradation and bioaccumulation). If no test data exist, the criteria for mixture classification has to be used (calculation method) in this case the toxicological data of the ingredients are shown.

### 12.1 **Aquatic toxicity:**

Acute (short-term) fish toxicity



according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 555 - Phalloidin (600X)

Version: US, Page 10 of 12, Revision date: 13/10/2023

Chronic (long-term) fish toxicity

Acute (short-term) toxicity to crustacea

Chronic (long-term) toxicity to crustacea

Acute (short-term) toxicity to algae and cyanobacteria

Toxicity to microorganisms and other aquatic plants / organisms

Assessment / Classification:

### **12.2 Persistence and degradability**

Biodegradation:

Abiotic Degradation:

Assessment / Classification:

### **12.3 Bioaccumulative potential**

Bioconcentration factor (BCF):

### **12.4 Mobility in soil**

### **12.5 Results of PBT and vPvB assessment**

### **12.6 Other adverse effects:**

Additional ecotoxicological information:

## **SECTION 13 : DISPOSAL CONSIDERATIONS**

### **13.1 Waste treatment methods**

Waste treatment options:

Dispose of waste according to applicable legislation. ;

Other disposal recommendations:

Additional information:

## **SECTION 14 : TRANSPORT INFORMATION**

ADR/RID/AND/IMDG/IATA

UN No.	
UN Proper shipping name	
Transport hazard class(es)	
Hazard label(s)	

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 555 - Phalloidin (600X)

Version: US, Page 11 of 12, Revision date: 13/10/2023

Packing group	
---------------	--

***Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code***

Land transport (ADR/RID)

Classification code ADR:	Special Provisions for ADR/RID:
Limited quantities for ADR/RID:	Excepted Quantities for ADR/RID:
Packing Instructions for ADR/RID:	
Special packing provisions for ADR/RID:	
Mixed packing provisions:	Portable tanks and bulk containers Instructions:
Portable tanks and bulk containers Special Provisions:	
ADR Tank Code:	ADR Tank special provisions:
Vehicle for tank carriage:	Special provisions for carriage Packages:
Special provisions for carriage Bulk:	
Special provisions for carriage for loading, unloading and handling:	
Special Provisions for carriage Operation:	
Hazard identification No:	Transport category (Tunnel restriction code):

Sea transport (IMDG)

Marine Pollutant:	Subsidiary risk(s) for IMDG:
Packing provisions for IMDG:	Limited quantities for IMDG:
Packing instructions for IMDG:	IBC Instructions:
IBC Provisions:	IMO tank instructions:
UN tank instructions:	Tanks and bulk Provisions:
EmS :	Stowage and segregation for IMDG:
Properties and observations:	

Inland waterway transport (ADN)

Classification Code ADN:	Special Provisions ADN:
Limited quantities ADN:	Excepted quantities ADN:
Carriage permitted:	Equipment required:
Provisions concerning loading and unloading:	
Provisions concerning carriage:	Number of blue cones/lights:
Remark:	

Air transport (ICAO-TI / IATA-DGR)

Subsidiary risk for IATA:	Excepted quantity for IATA:
Passenger and Cargo Aircraft Limited Quantities Packing Instructions:	
Passenger and Cargo Aircraft Limited Quantities Maximal Net Quantity :	
Passenger and Cargo Aircraft Packaging Instructions :	
Passenger and Cargo Aircraft Maximal Net Quantity :	
Cargo Aircraft only Packaging Instructions :	
Cargo Aircraft only Maximal Net Quantity :	
ERG code:	Special Provisions for IATA:

**SECTION 15 : REGULATORY INFORMATION**

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

**15.2 Chemical Safety Assessment:**

For the following substances of this mixture a chemical safety assessment has been carried out :

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Fluor 555 - Phalloidin (600X)

Version: US, Page 12 of 12, Revision date: 13/10/2023

## SECTION 16 : OTHER INFORMATION

### 16.1 Indication of changes

Date of the previous version:

Modifications:

### 16.2 Abbreviations and acronyms:

### 16.3 Key literature references and sources for data

### 16.4 Classification for mixtures and used evaluation method according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g):

See SECTION 2.1 (classification).

### 16.5 Relevant R-, H- and EUH-phrases (number and full text):

Code	Hazard statements
H300	Fatal if swallowed
H310	Fatal in contact with skin
H330	Fatal if inhaled

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Hoechst 33342 - Nuclear stain 70 µL

Version: US, Page 1 of 11, Revision date: 13/10/2023

## SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifier:

**Designation / Trade name: PhenoVue Hoechst 33342 - Nuclear stain 70 µL**

CAS No.:

Index No:

EC No:

REACH No:

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

Relevant identified uses: Use of the substance or mixture for Laboratory Research use only ;

Uses advised against: Do not use for diagnostics, therapeutics or other clinical uses. ;

### 1.3 Details of the supplier of the safety data sheet:

#### Supplier:

Name: CISBIO BIOASSAYS, company of Revvity Group - CBBIOA -

Address: Parc Marcel Boiteux - BP 84175 - 30200 Codolet, France

Phone : +33 4 66 79 67 05 - Fax : +33 4 66 79 67 50

E-Mail (competent person):  codolet.sds@revvity.com

### 1.4 EMERGENCY TELEPHONE NUMBER:

France - Numéro ORFILA (INRS) : + 33 (0)1 45 42 59 59

Ce numéro permet d'obtenir les coordonnées de tous les centres Anti-poison Français. Ces centres anti-poison et de toxicovigilance fournissent une aide médicale gratuite (hors coût d'appel), 24 heures sur 24 et 7 jours sur 7.

USA & Canada - Phone: 1-888-963-456 (1)

Other countries - Phone: +33 (0) 466 796 737 (2)

<https://www.cisbio.com>

<https://www.revvity.com>

(1) Available from Monday to Thursday 8:30 am to 5:30pm GMT-5 and Friday: 8:30 am to 3:00pm GMT-5

(2) Available from Monday to Friday 9:00 am to 5:30 pm GMT+2

## SECTION 2 : HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture:

Classification in accordance with 29 CFR 1910 (OSHA HCS)	Category code	Hazard statement	Precautionary statement
The substance or mixture is not classified as hazardous in accordance with 29 CFR 1910 (OSHA HCS)	None	None	None

### 2.2 Label elements

Labelling according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

#### Product identifier:

Designation / Trade name: PhenoVue Hoechst 33342 - Nuclear stain 70 µL

Substances contained in this product:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Hoechst 33342 - Nuclear stain 70 µL

Version: US, Page 2 of 11, Revision date: 13/10/2023

---

Hazard pictograms

Signal word:

Hazard and precautionary statements:

**2.3 Other hazards**

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC)  $\geq 0.1\%$  published by the European CHemicals Agency (ECHA) under article 57 of REACH. The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006. ;

Adverse human health effects:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Hoechst 33342 - Nuclear stain 70 µL

Version: US, Page 3 of 11, Revision date: 13/10/2023

## SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

#### Hazardous ingredients:

This mixture does not contain any hazardous substances at the concentration limits given in Regulation (EC) No. 1272/2008 and OSHA Hazard Communication Standard 29 CFR 1910.1200.

#### Additional information:

Full text of H- and EUH-phrases: see SECTION 16.

## SECTION 4 : FIRST AID MEASURES

### 4.1 Description of first aid measures

**General information:** Do not leave affected person unattended. ; Remove affected person from the danger area and lay down. ;

**Following inhalation:** In case of respiratory tract irritation, consult a physician. ; Provide fresh air. ;

**Following skin contact:**After contact with skin, wash immediately with water ; Remove contaminated clothing ;

**Following eye contact:** After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. ;

**Following ingestion:** Do NOT induce vomiting. ; Give nothing to eat or drink. ; If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. ;

**Self-protection of the first aider:**

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

Symptoms: No known symptoms to date. ;

Effects:

### 4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor:

## SECTION 5 : FIREFIGHTING MEASURES

### 5.1 Extinguishing media:

Suitable extinguishing media: This product is not flammable. Use extinguishing agent suitable for type of surrounding fire ;

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

Hazardous combustion products: /

### 5.3 Advice for fire-fighters

Wear Protective clothing. ;

Additional information:

## SECTION 6 : ACCIDENTAL RELEASE MEASURES

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

Emergency procedures: Provide adequate ventilation. ; Emergency procedures: Remove persons to safety. ; Personal precautions: Use personal protection equipment (see section 8). ;

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Hoechst 33342 - Nuclear stain 70 µL

Version: US, Page 4 of 11, Revision date: 13/10/2023

## 6.2 Environmental precautions

Do not allow to enter into surface water or drains. ; Ensure all waste water is collected and treated via a waste water treatment plant. ;

## 6.3 Methods and material for containment and cleaning up

For cleaning up: Suitable material for taking up: Absorbing material, organic ;

Other information:

## 6.4 Reference to other sections

Additional information:

# SECTION 7 : HANDLING AND STORAGE

## 7.1 Precautions for safe handling

Protective measures:

Advice on safe handling: Avoid contact with skin, eyes and clothes. ; Avoid: Eye contact ; Avoid: Generation/formation of aerosols ; Avoid: Skin contact ; Avoid: inhalation ; In the immediate working surroundings there must be: Emergency shower installed ; In the immediate working surroundings there must be: Provide eye shower and label its location conspicuously ; Wash contaminated clothing immediately. ;

Fire preventions:

Do not eat, drink or smoke in areas where reagents are handled. ; Do not pipet by mouth ; Wear suitable one-way gloves at work ;

Advice on general occupational hygiene: Handle in accordance with good industrial hygiene and safety practice ; Observe technical data sheet. ; Remove contaminated, saturated clothing. ; Wash hands before breaks and after work. ;

## 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels: Keep container tightly closed. ; Keep-store only in original container or in properly labeled containers ;

Hints on storage assembly:

Materials to avoid:

Further information on storage conditions:

## 7.3 Specific end uses:

Recommendations on specific end uses: Observe technical data sheet. ;

# SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control parameters

Preliminary remark:

### 8.1.1 Occupational exposure limits:

- OSHA (USA)

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Hoechst 33342 - Nuclear stain 70 µL

Version: US, Page 5 of 11, Revision date: 13/10/2023

8.1.2 DNEL/PNEC-values:

- DNEL worker
  
  
  
- DNEL consumer
  
  
  
- PNEC

**8.2 Exposure controls**

8.2.1 Appropriate engineering controls:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See section 7

8.2.2 Personal protective equipment:

Eye / Face protection: Safety glasses with side-shields ;

Skin protection:Gloves ; Laboratory coats ;

Respiratory protection:Ensure adequate ventilation ;

Thermal hazards:

8.2.3 Environmental exposure controls:

Consumer exposure control

Measures related to consumer uses of the substance (as such or in mixtures):

Measures related to the service life of the substance in articles:

**SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties**

Appearance

Physical state	Liquid ;
Colour	Yellow ;
Odour	
Odour threshold (ppm)	

	Value	Concentration (mol/L)	Method	Temperature (°C)	Pressure (kPa)	Remark
pH	2,8					
Melting point (°C)						
Freezing point (°C)						
Initial boiling point/boiling range (°C)						
Flash point (°C)						
Evaporation rate (kg/m <sup>2</sup> /h)						
Flammability (type : ) (%)						
Upper/lower flammability or explosive limits	Upper explosive limit (%)					
	Lower explosive limit (%)					
Vapour pressure (kPa)						
Vapour density (g/cm <sup>3</sup> )						
	Density (g/cm <sup>3</sup> )					



according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Hoechst 33342 - Nuclear stain 70 µL

Version: US, Page 6 of 11, Revision date: 13/10/2023

Densities	Relative density (g/cm <sup>3</sup> )					
	Bulk density (g/cm <sup>3</sup> )					
	Critical density (g/cm <sup>3</sup> )					
Solubility (Type : ) (g/L)						
Partition coefficient (log Pow) n-octanol/water at pH :						
Auto-ignition temperature (°C)						
Decomposition temperature (°C) Decomposition energy : kJ						
Viscosity	Viscosity, dynamic (poiseuille)					
	Viscosity, cinematic (cm <sup>2</sup> /s)					
Explosive properties						
Oxidising properties						

**9.2 Other information:**

No other relevant data available

**SECTION 10 : STABILITY AND REACTIVITY**

**10.1 Reactivity**

This material is considered to be non-reactive under normal use conditions. ;

**10.2 Chemical stability**

**10.3 Possibility of hazardous reactions**

**10.4 Conditions to avoid:**

**10.5 Incompatible materials:**

**10.6 Hazardous decomposition products:**

Does not decompose when used for intended uses. ; Thermal decomposition can lead to the escape of irritating gases and vapors. ;

**SECTION 11 : TOXICOLOGICAL INFORMATION**

Toxicokinetics, metabolism and distribution

**11.1 Information on toxicological effects**

Substances

- **Acute toxicity**

Animal data:

Acute oral toxicity:

Acute dermal toxicity:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Hoechst 33342 - Nuclear stain 70 µL

Version: US, Page 7 of 11, Revision date: 13/10/2023

---

Acute inhalative toxicity:

Practical experience / human evidence:

Assessment / Classification:

General Remark:

- **Skin corrosion/irritation**

Animal data:

In-vitro skin test method:

In-vitro skin test result:

Assessment / Classification:

- **Eye damage/irritation**

Animal data:

In vitro eye test method:

In vitro eye test result:

Assessment / Classification:

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
  - Germ cell mutagenicity:

Animal data:

Assessment / Classification:

- Carcinogenicity

Practical experience / human evidence:

Animal data:

Other information:

Assessment / Classification:

- Reproductive toxicity

Practical experience / human evidence:

Animal data:

Other information:

Assessment / Classification:

Overall assessment on CMR properties:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Hoechst 33342 - Nuclear stain 70 µL

Version: US, Page 8 of 11, Revision date: 13/10/2023

- **Specific target organ toxicity (single exposure)**
  - STOT SE 1 and 2

Animal data:

Other information:

- STOT SE 3

Practical experience / human evidence:

Other information:

Assessment / Classification:

- **Specific target organ toxicity (repeated exposure)**

Practical experience / human evidence:

Animal data:

Assessment / Classification:

Other information

- **Aspiration hazard**

Practical experience / human evidence:

Experimental data: viscosity data: see SECTION 9.

Assessment / Classification:

Remark:

#### 11.1.1 Mixtures

No toxicological information is available for the mixture itself

## SECTION 12 : ECOLOGICAL INFORMATION

In case that test data regarding one endpoint/differentiation exist for the mixture itself, the classification is carried out according to the substance criteria (excluding biodegradation and bioaccumulation). If no test data exist, the criteria for mixture classification has to be used (calculation method); in this case the toxicological data of the ingredients are shown.

### 12.1 **Aquatic toxicity:**

Acute (short-term) fish toxicity

Chronic (long-term) fish toxicity

Acute (short-term) toxicity to crustacea

Chronic (long-term) toxicity to crustacea

Acute (short-term) toxicity to algae and cyanobacteria

Toxicity to microorganisms and other aquatic plants / organisms

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Hoechst 33342 - Nuclear stain 70 µL

Version: US, Page 9 of 11, Revision date: 13/10/2023

Assessment / Classification:

**12.2 Persistence and degradability**

Biodegradation:

Abiotic Degradation:

Assessment / Classification:

**12.3 Bioaccumulative potential**

Bioconcentration factor (BCF):

**12.4 Mobility in soil**

**12.5 Results of PBT and vPvB assessment**

**12.6 Other adverse effects:**

Additional ecotoxicological information:

**SECTION 13 : DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods**

Waste treatment options:

Dispose of waste according to applicable legislation. ;

Other disposal recommendations:

Additional information:

**SECTION 14 : TRANSPORT INFORMATION**

ADR/RID/AND/IMDG/IATA

UN No.	
UN Proper shipping name	
Transport hazard class(es)	
Hazard label(s)	
Packing group	

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Land transport (ADR/RID)

Classification code ADR:

Special Provisions for ADR/RID:

Limited quantities for ADR/RID:

Excepted Quantities for ADR/RID:

Packing Instructions for ADR/RID:

Special packing provisions for ADR/RID:

Mixed packing provisions:

Portable tanks and bulk containers Instructions:

Portable tanks and bulk containers Special Provisions:

ADR Tank Code:

ADR Tank special provisions:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Hoechst 33342 - Nuclear stain 70 µL

Version: US, Page 10 of 11, Revision date: 13/10/2023

Vehicle for tank carriage: Special provisions for carriage Packages:  
 Special provisions for carriage Bulk:  
 Special provisions for carriage for loading, unloading and handling:  
 Special Provisions for carriage Operation:  
 Hazard identification No: Transport category (Tunnel restriction code):

#### Sea transport (IMDG)

Marine Pollutant: Subsidiary risk(s) for IMDG:  
 Packing provisions for IMDG: Limited quantities for IMDG:  
 Packing instructions for IMDG: IBC Instructions:  
 IBC Provisions: IMO tank instructions:  
 UN tank instructions: Tanks and bulk Provisions:  
 EmS : Stowage and segregation for IMDG:  
 Properties and observations:

#### Inland waterway transport (ADN)

Classification Code ADN: Special Provisions ADN:  
 Limited quantities ADN: Excepted quantities ADN:  
 Carriage permitted: Equipment required:  
 Provisions concerning loading and unloading:  
 Provisions concerning carriage: Number of blue cones/lights:  
 Remark:

#### Air transport (ICAO-TI / IATA-DGR)

Subsidiary risk for IATA: Excepted quantity for IATA:  
 Passenger and Cargo Aircraft Limited Quantities Packing Instructions:  
 Passenger and Cargo Aircraft Limited Quantities Maximal Net Quantity :  
 Passenger and Cargo Aircraft Packaging Instructions :  
 Passenger and Cargo Aircraft Maximal Net Quantity :  
 Cargo Aircraft only Packaging Instructions :  
 Cargo Aircraft only Maximal Net Quantity :  
 ERG code: Special Provisions for IATA:

## SECTION 15 : REGULATORY INFORMATION

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

### 15.2 Chemical Safety Assessment:

For the following substances of this mixture a chemical safety assessment has been carried out :

## SECTION 16 : OTHER INFORMATION

### 16.1 Indication of changes

Date of the previous version:24/09/2023

Modifications:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Hoechst 33342 - Nuclear stain 70 µL

Version: US, Page 11 of 11, Revision date: 13/10/2023

---

**16.2 Abbreviations and acronyms:**

**16.3 Key literature references and sources for data**

**16.4 Classification for mixtures and used evaluation method according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g):**

See SECTION 2.1 (classification).

**16.5 Relevant R-, H- and EUH-phrases (number and full text):**

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue anti-B3 Tubulin antibody - 100X 100 µL Unit

Version: US, Page 1 of 11, Revision date: 28/11/2023

## SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifier:

**Designation / Trade name: PhenoVue anti-B3 Tubulin antibody - 100X 100 µL Unit**

CAS No.:

Index No:

EC No:

REACH No:

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

Relevant identified uses: Use of the substance or mixture for Laboratory Research use only ;

Uses advised against: Do not use for diagnostics, therapeutics or other clinical uses. ;

### 1.3 Details of the supplier of the safety data sheet:

#### Supplier:

Name: CISBIO BIOASSAYS, company of Revvity Group - CBBIOA -

Address: Parc Marcel Boiteux - BP 84175 - 30200 Codolet, France

Phone : +33 4 66 79 67 05 - Fax : +33 4 66 79 67 50

E-Mail (competent person):  codolet.sds@revvity.com

### 1.4 EMERGENCY TELEPHONE NUMBER:

France - Numéro ORFILA (INRS) : + 33 (0)1 45 42 59 59

Ce numéro permet d'obtenir les coordonnées de tous les centres Anti-poison Français. Ces centres anti-poison et de toxicovigilance fournissent une aide médicale gratuite (hors coût d'appel), 24 heures sur 24 et 7 jours sur 7.

USA & Canada - Phone: 1-888-963-456 (1)

Other countries - Phone: +33 (0) 466 796 737 (2)

<https://www.cisbio.com>

<https://www.revvity.com>

(1) Available from Monday to Thursday 8:30 am to 5:30pm GMT-5 and Friday: 8:30 am to 3:00pm GMT-5

(2) Available from Monday to Friday 9:00 am to 5:30 pm GMT+2

## SECTION 2 : HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture:

Classification in accordance with 29 CFR 1910 (OSHA HCS)	Category code	Hazard statement	Precautionary statement
The substance or mixture is not classified as hazardous in accordance with 29 CFR 1910 (OSHA HCS)	None	None	None

### 2.2 Label elements

Labelling according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

#### Product identifier:

Designation / Trade name: PhenoVue anti-B3 Tubulin antibody - 100X 100 µL Unit

Substances contained in this product:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue anti-B3 Tubulin antibody - 100X 100 µL Unit

Version: US, Page 2 of 11, Revision date: 28/11/2023

---

Hazard pictograms

Signal word:

Hazard and precautionary statements:

**2.3 Other hazards**

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC)  $\geq 0.1\%$  published by the European CHemicals Agency (ECHA) under article 57 of REACH. The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006. ;

Adverse human health effects:



according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue anti-B3 Tubulin antibody - 100X 100 µL Unit

Version: US, Page 3 of 11, Revision date: 28/11/2023

## SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

#### Hazardous ingredients:

This mixture does not contain any hazardous substances at the concentration limits given in Regulation (EC) No. 1272/2008 and OSHA Hazard Communication Standard 29 CFR 1910.1200.

#### Additional information:

Full text of H- and EUH-phrases: see SECTION 16.

## SECTION 4 : FIRST AID MEASURES

### 4.1 Description of first aid measures

**General information:** Do not leave affected person unattended. ; Remove affected person from the danger area and lay down. ;

**Following inhalation:** In case of respiratory tract irritation, consult a physician. ; Provide fresh air. ;

**Following skin contact:**After contact with skin, wash immediately with water ; Remove contaminated clothing ;

**Following eye contact:** After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. ;

**Following ingestion:** Do NOT induce vomiting. ; Give nothing to eat or drink. ; If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. ;

**Self-protection of the first aider:**

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

Symptoms: No known symptoms to date. ;

Effects:

### 4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor:

## SECTION 5 : FIREFIGHTING MEASURES

### 5.1 Extinguishing media:

Suitable extinguishing media: This product is not flammable. Use extinguishing agent suitable for type of surrounding fire ;

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

Hazardous combustion products: /

### 5.3 Advice for fire-fighters

Wear Protective clothing. ;

Additional information:

## SECTION 6 : ACCIDENTAL RELEASE MEASURES

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

Emergency procedures: Provide adequate ventilation. ; Emergency procedures: Remove persons to safety. ; Personal precautions: Use personal protection equipment (see section 8). ;

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue anti-B3 Tubulin antibody - 100X 100 µL Unit

Version: US, Page 4 of 11, Revision date: 28/11/2023

## 6.2 Environmental precautions

Do not allow to enter into surface water or drains. ; Ensure all waste water is collected and treated via a waste water treatment plant. ;

## 6.3 Methods and material for containment and cleaning up

For cleaning up: Suitable material for taking up: Absorbing material, organic ;

Other information:

## 6.4 Reference to other sections

Additional information:

# SECTION 7 : HANDLING AND STORAGE

## 7.1 Precautions for safe handling

Protective measures:

Advice on safe handling: Avoid contact with skin, eyes and clothes. ; Avoid: Eye contact ; Avoid: Generation/formation of aerosols ; Avoid: Skin contact ; Avoid: inhalation ; In the immediate working surroundings there must be: Emergency shower installed ; In the immediate working surroundings there must be: Provide eye shower and label its location conspicuously ; Wash contaminated clothing immediately. ;

Fire preventions:

Do not eat, drink or smoke in areas where reagents are handled. ; Do not pipet by mouth ; Wear suitable one-way gloves at work ;

Advice on general occupational hygiene: Handle in accordance with good industrial hygiene and safety practice ; Observe technical data sheet. ; Remove contaminated, saturated clothing. ; Wash hands before breaks and after work. ;

## 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels: Keep container tightly closed. ; Keep-store only in original container or in properly labeled containers ;

Hints on storage assembly:

Materials to avoid:

Further information on storage conditions:

## 7.3 Specific end uses:

Recommendations on specific end uses: Observe technical data sheet. ;

# SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control parameters

Preliminary remark:

### 8.1.1 Occupational exposure limits:

- OSHA (USA)

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue anti-B3 Tubulin antibody - 100X 100 µL Unit

Version: US, Page 5 of 11, Revision date: 28/11/2023

8.1.2 DNEL/PNEC-values:

- DNEL worker
  
  
  
- DNEL consumer
  
  
  
- PNEC

**8.2 Exposure controls**

8.2.1 Appropriate engineering controls:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See section 7

8.2.2 Personal protective equipment:

Eye / Face protection: Safety glasses with side-shields ;

Skin protection:Gloves ; Laboratory coats ;

Respiratory protection:Ensure adequate ventilation ;

Thermal hazards:

8.2.3 Environmental exposure controls:

Consumer exposure control

Measures related to consumer uses of the substance (as such or in mixtures):

Measures related to the service life of the substance in articles:

**SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties**

Appearance

Physical state	Liquid ;
Colour	Colorless ;
Odour	
Odour threshold (ppm)	

	Value	Concentration (mol/L)	Method	Temperature (°C)	Pressure (kPa)	Remark
pH	7					
Melting point (°C)						
Freezing point (°C)						
Initial boiling point/boiling range (°C)						
Flash point (°C)						
Evaporation rate (kg/m <sup>2</sup> /h)						
Flammability (type : ) (%)						
Upper/lower flammability or explosive limits	Upper explosive limit (%)					
	Lower explosive limit (%)					
Vapour pressure (kPa)						
Vapour density (g/cm <sup>3</sup> )						
	Density (g/cm <sup>3</sup> )					

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue anti-B3 Tubulin antibody - 100X 100 µL Unit

Version: US, Page 6 of 11, Revision date: 28/11/2023

Densities	Relative density (g/cm <sup>3</sup> )					
	Bulk density (g/cm <sup>3</sup> )					
	Critical density (g/cm <sup>3</sup> )					
Solubility (Type : ) (g/L)						
Partition coefficient (log Pow) n-octanol/water at pH :						
Auto-ignition temperature (°C)						
Decomposition temperature (°C) Decomposition energy : kJ						
Viscosity	Viscosity, dynamic (poiseuille)					
	Viscosity, cinematic (cm <sup>2</sup> /s)					
Explosive properties						
Oxidising properties						

**9.2 Other information:**

No other relevant data available

**SECTION 10 : STABILITY AND REACTIVITY**

**10.1 Reactivity**

This material is considered to be non-reactive under normal use conditions. ;

**10.2 Chemical stability**

**10.3 Possibility of hazardous reactions**

**10.4 Conditions to avoid:**

**10.5 Incompatible materials:**

**10.6 Hazardous decomposition products:**

Does not decompose when used for intended uses. ; Thermal decomposition can lead to the escape of irritating gases and vapors. ;

**SECTION 11 : TOXICOLOGICAL INFORMATION**

Toxicokinetics, metabolism and distribution

**11.1 Information on toxicological effects**

Substances

- **Acute toxicity**

Animal data:

Acute oral toxicity:

Acute dermal toxicity:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue anti-B3 Tubulin antibody - 100X 100 µL Unit

Version: US, Page 7 of 11, Revision date: 28/11/2023

---

Acute inhalative toxicity:

Practical experience / human evidence:

Assessment / Classification:

General Remark:

- **Skin corrosion/irritation**

Animal data:

In-vitro skin test method:

In-vitro skin test result:

Assessment / Classification:

- **Eye damage/irritation**

Animal data:

In vitro eye test method:

In vitro eye test result:

Assessment / Classification:

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
  - Germ cell mutagenicity:

Animal data:

Assessment / Classification:

- Carcinogenicity

Practical experience / human evidence:

Animal data:

Other information:

Assessment / Classification:

- Reproductive toxicity

Practical experience / human evidence:

Animal data:

Other information:

Assessment / Classification:

Overall assessment on CMR properties:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue anti-B3 Tubulin antibody - 100X 100 µL Unit

Version: US, Page 8 of 11, Revision date: 28/11/2023

- **Specific target organ toxicity (single exposure)**
  - STOT SE 1 and 2

Animal data:

Other information:

- STOT SE 3

Practical experience / human evidence:

Other information:

Assessment / Classification:

- **Specific target organ toxicity (repeated exposure)**

Practical experience / human evidence:

Animal data:

Assessment / Classification:

Other information

- **Aspiration hazard**

Practical experience / human evidence:

Experimental data: viscosity data: see SECTION 9.

Assessment / Classification:

Remark:

#### 11.1.1 Mixtures

No toxicological information is available for the mixture itself

## SECTION 12 : ECOLOGICAL INFORMATION

In case that test data regarding one endpoint/differentiation exist for the mixture itself, the classification is carried out according to the substance criteria (excluding biodegradation and bioaccumulation). If no test data exist, the criteria for mixture classification has to be used (calculation method); in this case the toxicological data of the ingredients are shown.

### 12.1 **Aquatic toxicity:**

Acute (short-term) fish toxicity

Chronic (long-term) fish toxicity

Acute (short-term) toxicity to crustacea

Chronic (long-term) toxicity to crustacea

Acute (short-term) toxicity to algae and cyanobacteria

Toxicity to microorganisms and other aquatic plants / organisms

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue anti-B3 Tubulin antibody - 100X 100 µL Unit  
 Version: US, Page 9 of 11, Revision date: 28/11/2023

Assessment / Classification:

**12.2 Persistence and degradability**

Biodegradation:

Abiotic Degradation:

Assessment / Classification:

**12.3 Bioaccumulative potential**

Bioconcentration factor (BCF):

**12.4 Mobility in soil**

**12.5 Results of PBT and vPvB assessment**

**12.6 Other adverse effects:**

Additional ecotoxicological information:

**SECTION 13 : DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods**

Waste treatment options:  
 Dispose of waste according to applicable legislation. ;

Other disposal recommendations:  
 Additional information:

**SECTION 14 : TRANSPORT INFORMATION**

ADR/RID/AND/IMDG/IATA

UN No.	
UN Proper shipping name	
Transport hazard class(es)	
Hazard label(s)	
Packing group	

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Land transport (ADR/RID)

Classification code ADR:	Special Provisions for ADR/RID:
Limited quantities for ADR/RID:	Excepted Quantities for ADR/RID:
Packing Instructions for ADR/RID:	
Special packing provisions for ADR/RID:	
Mixed packing provisions:	Portable tanks and bulk containers Instructions:
Portable tanks and bulk containers Special Provisions:	
ADR Tank Code:	ADR Tank special provisions:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue anti-B3 Tubulin antibody - 100X 100 µL Unit

Version: US, Page 10 of 11, Revision date: 28/11/2023

Vehicle for tank carriage: Special provisions for carriage Packages:  
 Special provisions for carriage Bulk:  
 Special provisions for carriage for loading, unloading and handling:  
 Special Provisions for carriage Operation:  
 Hazard identification No: Transport category (Tunnel restriction code):

#### Sea transport (IMDG)

Marine Pollutant: Subsidiary risk(s) for IMDG:  
 Packing provisions for IMDG: Limited quantities for IMDG:  
 Packing instructions for IMDG: IBC Instructions:  
 IBC Provisions: IMO tank instructions:  
 UN tank instructions: Tanks and bulk Provisions:  
 EmS : Stowage and segregation for IMDG:  
 Properties and observations:

#### Inland waterway transport (ADN)

Classification Code ADN: Special Provisions ADN:  
 Limited quantities ADN: Excepted quantities ADN:  
 Carriage permitted: Equipment required:  
 Provisions concerning loading and unloading:  
 Provisions concerning carriage: Number of blue cones/lights:  
 Remark:

#### Air transport (ICAO-TI / IATA-DGR)

Subsidiary risk for IATA: Excepted quantity for IATA:  
 Passenger and Cargo Aircraft Limited Quantities Packing Instructions:  
 Passenger and Cargo Aircraft Limited Quantities Maximal Net Quantity :  
 Passenger and Cargo Aircraft Packaging Instructions :  
 Passenger and Cargo Aircraft Maximal Net Quantity :  
 Cargo Aircraft only Packaging Instructions :  
 Cargo Aircraft only Maximal Net Quantity :  
 ERG code: Special Provisions for IATA:

## SECTION 15 : REGULATORY INFORMATION

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

**15.2 Chemical Safety Assessment:**

For the following substances of this mixture a chemical safety assessment has been carried out :

## SECTION 16 : OTHER INFORMATION

**16.1 Indication of changes**

Date of the previous version:16/11/2023

Modifications:



according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue anti-B3 Tubulin antibody - 100X 100 µL Unit

Version: US, Page 11 of 11, Revision date: 28/11/2023

---

**16.2 Abbreviations and acronyms:**

**16.3 Key literature references and sources for data**

**16.4 Classification for mixtures and used evaluation method according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g):**

See SECTION 2.1 (classification).

**16.5 Relevant R-, H- and EUH-phrases (number and full text):**

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue anti-Nestin antibody - 100X 100 µL Unit

Version: US, Page 1 of 11, Revision date: 28/11/2023

## SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifier:

**Designation / Trade name: PhenoVue anti-Nestin antibody - 100X 100 µL Unit**

CAS No.:

Index No:

EC No:

REACH No:

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

Relevant identified uses: Use of the substance or mixture for Laboratory Research use only ;

Uses advised against: Do not use for diagnostics, therapeutics or other clinical uses. ;

### 1.3 Details of the supplier of the safety data sheet:

#### Supplier:

Name: CISBIO BIOASSAYS, company of Revvity Group - CBBIOA -

Address: Parc Marcel Boiteux - BP 84175 - 30200 Codolet, France

Phone : +33 4 66 79 67 05 - Fax : +33 4 66 79 67 50

E-Mail (competent person):  codolet.sds@revvity.com

### 1.4 EMERGENCY TELEPHONE NUMBER:

France - Numéro ORFILA (INRS) : + 33 (0)1 45 42 59 59

Ce numéro permet d'obtenir les coordonnées de tous les centres Anti-poison Français. Ces centres anti-poison et de toxicovigilance fournissent une aide médicale gratuite (hors coût d'appel), 24 heures sur 24 et 7 jours sur 7.

USA & Canada - Phone: 1-888-963-456 (1)

Other countries - Phone: +33 (0) 466 796 737 (2)

<https://www.cisbio.com>

<https://www.revvity.com>

(1) Available from Monday to Thursday 8:30 am to 5:30pm GMT-5 and Friday: 8:30 am to 3:00pm GMT-5

(2) Available from Monday to Friday 9:00 am to 5:30 pm GMT+2

## SECTION 2 : HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture:

Classification in accordance with 29 CFR 1910 (OSHA HCS)	Category code	Hazard statement	Precautionary statement
The substance or mixture is not classified as hazardous in accordance with 29 CFR 1910 (OSHA HCS)	None	None	None

### 2.2 Label elements

Labelling according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

#### Product identifier:

Designation / Trade name: PhenoVue anti-Nestin antibody - 100X 100 µL Unit

Substances contained in this product:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue anti-Nestin antibody - 100X 100 µL Unit

Version: US, Page 2 of 11, Revision date: 28/11/2023

---

Hazard pictograms

Signal word:

Hazard and precautionary statements:

**2.3 Other hazards**

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC)  $\geq 0.1\%$  published by the European CHemicals Agency (ECHA) under article 57 of REACH. The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006. ;

Adverse human health effects:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue anti-Nestin antibody - 100X 100 µL Unit

Version: US, Page 3 of 11, Revision date: 28/11/2023

## SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

#### Hazardous ingredients:

This mixture does not contain any hazardous substances at the concentration limits given in Regulation (EC) No. 1272/2008 and OSHA Hazard Communication Standard 29 CFR 1910.1200.

#### Additional information:

Full text of H- and EUH-phrases: see SECTION 16.

## SECTION 4 : FIRST AID MEASURES

### 4.1 Description of first aid measures

**General information:** Do not leave affected person unattended. ; Remove affected person from the danger area and lay down. ;

**Following inhalation:** In case of respiratory tract irritation, consult a physician. ; Provide fresh air. ;

**Following skin contact:**After contact with skin, wash immediately with water ; Remove contaminated clothing ;

**Following eye contact:** After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. ;

**Following ingestion:** Do NOT induce vomiting. ; Give nothing to eat or drink. ; If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. ;

**Self-protection of the first aider:**

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

Symptoms: No known symptoms to date. ;

Effects:

### 4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor:

## SECTION 5 : FIREFIGHTING MEASURES

### 5.1 Extinguishing media:

Suitable extinguishing media: This product is not flammable. Use extinguishing agent suitable for type of surrounding fire ;

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

Hazardous combustion products: /

### 5.3 Advice for fire-fighters

Wear Protective clothing. ;

Additional information:

## SECTION 6 : ACCIDENTAL RELEASE MEASURES

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

Emergency procedures: Provide adequate ventilation. ; Emergency procedures: Remove persons to safety. ; Personal precautions: Use personal protection equipment (see section 8). ;

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue anti-Nestin antibody - 100X 100 µL Unit

Version: US, Page 4 of 11, Revision date: 28/11/2023

## 6.2 Environmental precautions

Do not allow to enter into surface water or drains. ; Ensure all waste water is collected and treated via a waste water treatment plant. ;

## 6.3 Methods and material for containment and cleaning up

For cleaning up: Suitable material for taking up: Absorbing material, organic ;

Other information:

## 6.4 Reference to other sections

Additional information:

# SECTION 7 : HANDLING AND STORAGE

## 7.1 Precautions for safe handling

Protective measures:

Advice on safe handling: Avoid contact with skin, eyes and clothes. ; Avoid: Eye contact ; Avoid: Generation/formation of aerosols ; Avoid: Skin contact ; Avoid: inhalation ; In the immediate working surroundings there must be: Emergency shower installed ; In the immediate working surroundings there must be: Provide eye shower and label its location conspicuously ; Wash contaminated clothing immediately. ;

Fire preventions:

Do not eat, drink or smoke in areas where reagents are handled. ; Do not pipet by mouth ; Wear suitable one-way gloves at work ;

Advice on general occupational hygiene: Handle in accordance with good industrial hygiene and safety practice ; Observe technical data sheet. ; Remove contaminated, saturated clothing. ; Wash hands before breaks and after work. ;

## 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels: Keep container tightly closed. ; Keep-store only in original container or in properly labeled containers ;

Hints on storage assembly:

Materials to avoid:

Further information on storage conditions:

## 7.3 Specific end uses:

Recommendations on specific end uses: Observe technical data sheet. ;

# SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control parameters

Preliminary remark:

### 8.1.1 Occupational exposure limits:

- OSHA (USA)

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue anti-Nestin antibody - 100X 100 µL Unit

Version: US, Page 5 of 11, Revision date: 28/11/2023

8.1.2 DNEL/PNEC-values:

- DNEL worker
  
  
  
- DNEL consumer
  
  
  
- PNEC

**8.2 Exposure controls**

8.2.1 Appropriate engineering controls:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See section 7

8.2.2 Personal protective equipment:

Eye / Face protection: Safety glasses with side-shields ;

Skin protection:Gloves ; Laboratory coats ;

Respiratory protection:Ensure adequate ventilation ;

Thermal hazards:

8.2.3 Environmental exposure controls:

Consumer exposure control

Measures related to consumer uses of the substance (as such or in mixtures):

Measures related to the service life of the substance in articles:

**SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties**

Appearance

Physical state	Liquid ;
Colour	Colorless ;
Odour	
Odour threshold (ppm)	

	Value	Concentration (mol/L)	Method	Temperature (°C)	Pressure (kPa)	Remark
pH	7					
Melting point (°C)						
Freezing point (°C)						
Initial boiling point/boiling range (°C)						
Flash point (°C)						
Evaporation rate (kg/m <sup>2</sup> /h)						
Flammability (type : ) (%)						
Upper/lower flammability or explosive limits	Upper explosive limit (%)					
	Lower explosive limit (%)					
Vapour pressure (kPa)						
Vapour density (g/cm <sup>3</sup> )						
	Density (g/cm <sup>3</sup> )					

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue anti-Nestin antibody - 100X 100 µL Unit

Version: US, Page 6 of 11, Revision date: 28/11/2023

Densities	Relative density (g/cm <sup>3</sup> )					
	Bulk density (g/cm <sup>3</sup> )					
	Critical density (g/cm <sup>3</sup> )					
Solubility (Type : ) (g/L)						
Partition coefficient (log Pow) n-octanol/water at pH :						
Auto-ignition temperature (°C)						
Decomposition temperature (°C) Decomposition energy : kJ						
Viscosity	Viscosity, dynamic (poiseuille)					
	Viscosity, cinematic (cm <sup>2</sup> /s)					
Explosive properties						
Oxidising properties						

### 9.2 Other information:

No other relevant data available

## SECTION 10 : STABILITY AND REACTIVITY

### 10.1 Reactivity

This material is considered to be non-reactive under normal use conditions. ;

### 10.2 Chemical stability

### 10.3 Possibility of hazardous reactions

### 10.4 Conditions to avoid:

### 10.5 Incompatible materials:

### 10.6 Hazardous decomposition products:

Does not decompose when used for intended uses. ; Thermal decomposition can lead to the escape of irritating gases and vapors. ;

## SECTION 11 : TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution

### 11.1 Information on toxicological effects

#### Substances

- **Acute toxicity**

#### Animal data:

Acute oral toxicity:

Acute dermal toxicity:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue anti-Nestin antibody - 100X 100 µL Unit

Version: US, Page 7 of 11, Revision date: 28/11/2023

---

Acute inhalative toxicity:

Practical experience / human evidence:

Assessment / Classification:

General Remark:

- **Skin corrosion/irritation**

Animal data:

In-vitro skin test method:

In-vitro skin test result:

Assessment / Classification:

- **Eye damage/irritation**

Animal data:

In vitro eye test method:

In vitro eye test result:

Assessment / Classification:

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
  - Germ cell mutagenicity:

Animal data:

Assessment / Classification:

- Carcinogenicity

Practical experience / human evidence:

Animal data:

Other information:

Assessment / Classification:

- Reproductive toxicity

Practical experience / human evidence:

Animal data:

Other information:

Assessment / Classification:

Overall assessment on CMR properties:



according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue anti-Nestin antibody - 100X 100 µL Unit

Version: US, Page 8 of 11, Revision date: 28/11/2023

- **Specific target organ toxicity (single exposure)**
  - STOT SE 1 and 2

Animal data:

Other information:

- STOT SE 3

Practical experience / human evidence:

Other information:

Assessment / Classification:

- **Specific target organ toxicity (repeated exposure)**

Practical experience / human evidence:

Animal data:

Assessment / Classification:

Other information

- **Aspiration hazard**

Practical experience / human evidence:

Experimental data: viscosity data: see SECTION 9.

Assessment / Classification:

Remark:

#### 11.1.1 Mixtures

No toxicological information is available for the mixture itself

## SECTION 12 : ECOLOGICAL INFORMATION

In case that test data regarding one endpoint/differentiation exist for the mixture itself, the classification is carried out according to the substance criteria (excluding biodegradation and bioaccumulation). If no test data exist, the criteria for mixture classification has to be used (calculation method); in this case the toxicological data of the ingredients are shown.

### 12.1 **Aquatic toxicity:**

Acute (short-term) fish toxicity

Chronic (long-term) fish toxicity

Acute (short-term) toxicity to crustacea

Chronic (long-term) toxicity to crustacea

Acute (short-term) toxicity to algae and cyanobacteria

Toxicity to microorganisms and other aquatic plants / organisms

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue anti-Nestin antibody - 100X 100 µL Unit

Version: US, Page 9 of 11, Revision date: 28/11/2023

Assessment / Classification:

### 12.2 Persistence and degradability

Biodegradation:

Abiotic Degradation:

Assessment / Classification:

### 12.3 Bioaccumulative potential

Bioconcentration factor (BCF):

### 12.4 Mobility in soil

### 12.5 Results of PBT and vPvB assessment

### 12.6 Other adverse effects:

Additional ecotoxicological information:

## SECTION 13 : DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Waste treatment options:

Dispose of waste according to applicable legislation. ;

Other disposal recommendations:

Additional information:

## SECTION 14 : TRANSPORT INFORMATION

ADR/RID/AND/IMDG/IATA

UN No.	
UN Proper shipping name	
Transport hazard class(es)	
Hazard label(s)	
Packing group	

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Land transport (ADR/RID)

Classification code ADR:

Special Provisions for ADR/RID:

Limited quantities for ADR/RID:

Excepted Quantities for ADR/RID:

Packing Instructions for ADR/RID:

Special packing provisions for ADR/RID:

Mixed packing provisions:

Portable tanks and bulk containers Instructions:

Portable tanks and bulk containers Special Provisions:

ADR Tank Code:

ADR Tank special provisions:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue anti-Nestin antibody - 100X 100 µL Unit

Version: US, Page 10 of 11, Revision date: 28/11/2023

Vehicle for tank carriage: Special provisions for carriage Packages:  
 Special provisions for carriage Bulk:  
 Special provisions for carriage for loading, unloading and handling:  
 Special Provisions for carriage Operation:  
 Hazard identification No: Transport category (Tunnel restriction code):

#### Sea transport (IMDG)

Marine Pollutant: Subsidiary risk(s) for IMDG:  
 Packing provisions for IMDG: Limited quantities for IMDG:  
 Packing instructions for IMDG: IBC Instructions:  
 IBC Provisions: IMO tank instructions:  
 UN tank instructions: Tanks and bulk Provisions:  
 EmS : Stowage and segregation for IMDG:  
 Properties and observations:

#### Inland waterway transport (ADN)

Classification Code ADN: Special Provisions ADN:  
 Limited quantities ADN: Excepted quantities ADN:  
 Carriage permitted: Equipment required:  
 Provisions concerning loading and unloading:  
 Provisions concerning carriage: Number of blue cones/lights:  
 Remark:

#### Air transport (ICAO-TI / IATA-DGR)

Subsidiary risk for IATA: Excepted quantity for IATA:  
 Passenger and Cargo Aircraft Limited Quantities Packing Instructions:  
 Passenger and Cargo Aircraft Limited Quantities Maximal Net Quantity :  
 Passenger and Cargo Aircraft Packaging Instructions :  
 Passenger and Cargo Aircraft Maximal Net Quantity :  
 Cargo Aircraft only Packaging Instructions :  
 Cargo Aircraft only Maximal Net Quantity :  
 ERG code: Special Provisions for IATA:

## SECTION 15 : REGULATORY INFORMATION

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

**15.2 Chemical Safety Assessment:**

For the following substances of this mixture a chemical safety assessment has been carried out :

## SECTION 16 : OTHER INFORMATION

**16.1 Indication of changes**

Date of the previous version:16/11/2023

Modifications:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue anti-Nestin antibody - 100X 100 µL Unit

Version: US, Page 11 of 11, Revision date: 28/11/2023

---

**16.2 Abbreviations and acronyms:**

**16.3 Key literature references and sources for data**

**16.4 Classification for mixtures and used evaluation method according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g):**

See SECTION 2.1 (classification).

**16.5 Relevant R-, H- and EUH-phrases (number and full text):**

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue dye diluent A (5X) - 8 mL

Version: US, Page 1 of 11, Revision date: 28/11/2023

## SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifier:

**Designation / Trade name: PhenoVue dye diluent A (5X) - 8 mL**

CAS No.:

Index No:

EC No:

REACH No:

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

Relevant identified uses: Use of the substance or mixture for Laboratory Research use only ;

Uses advised against: Do not use for diagnostics, therapeutics or other clinical uses. ;

### 1.3 Details of the supplier of the safety data sheet:

#### Supplier:

Name: CISBIO BIOASSAYS, company of Revvity Group - CBBIOA -

Address: Parc Marcel Boiteux - BP 84175 - 30200 Codolet, France

Phone : +33 4 66 79 67 05 - Fax : +33 4 66 79 67 50

E-Mail (competent person):  codolet.sds@revvity.com

### 1.4 EMERGENCY TELEPHONE NUMBER:

France - Numéro ORFILA (INRS) : + 33 (0)1 45 42 59 59

Ce numéro permet d'obtenir les coordonnées de tous les centres Anti-poison Français. Ces centres anti-poison et de toxicovigilance fournissent une aide médicale gratuite (hors coût d'appel), 24 heures sur 24 et 7 jours sur 7.

USA & Canada - Phone: 1-888-963-456 (1)

Other countries - Phone: +33 (0) 466 796 737 (2)

<https://www.cisbio.com>

<https://www.revvity.com>

(1) Available from Monday to Thursday 8:30 am to 5:30pm GMT-5 and Friday: 8:30 am to 3:00pm GMT-5

(2) Available from Monday to Friday 9:00 am to 5:30 pm GMT+2

## SECTION 2 : HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture:

Classification in accordance with 29 CFR 1910 (OSHA HCS)	Category code	Hazard statement	Precautionary statement
The substance or mixture is not classified as hazardous in accordance with 29 CFR 1910 (OSHA HCS)	None	None	None

### 2.2 Label elements

Labelling according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

#### Product identifier:

Designation / Trade name: PhenoVue dye diluent A (5X) - 8 mL

Substances contained in this product:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue dye diluent A (5X) - 8 mL

Version: US, Page 2 of 11, Revision date: 28/11/2023

---

Hazard pictograms

Signal word:

Hazard and precautionary statements:

**2.3 Other hazards**

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC)  $\geq 0.1\%$  published by the European CHemicals Agency (ECHA) under article 57 of REACH. The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006. ;

Adverse human health effects:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue dye diluent A (5X) - 8 mL

Version: US, Page 3 of 11, Revision date: 28/11/2023

## SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

Hazardous ingredients:

Substance name	CAS n°	Index n°	EC n°	Classification in accordance with 29 CFR 1910 (OSHA HCS)	Concentration (%)	SCL	M-factor
sodium chloride	7647-14-5		231-598-3		< 10%		

Additional information:

Full text of H- and EUH-phrases: see SECTION 16.

## SECTION 4 : FIRST AID MEASURES

### 4.1 Description of first aid measures

**General information:** Do not leave affected person unattended. ;

**Following inhalation:** In case of respiratory tract irritation, consult a physician. ;

**Following skin contact:**After contact with skin, wash immediately with water ;

**Following eye contact:** After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. ;

**Following ingestion:** Do NOT induce vomiting. ;

**Self-protection of the first aider:**

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

Symptoms: No known symptoms to date. ;

Effects:

### 4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor:

## SECTION 5 : FIREFIGHTING MEASURES

### 5.1 Extinguishing media:

Suitable extinguishing media: This product is not flammable. Use extinguishing agent suitable for type of surrounding fire ;

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

Hazardous combustion products: /

### 5.3 Advice for fire-fighters

Wear Protective clothing. ;

Additional information:

## SECTION 6 : ACCIDENTAL RELEASE MEASURES

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

Emergency procedures: Provide adequate ventilation. ;

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue dye diluent A (5X) - 8 mL

Version: US, Page 4 of 11, Revision date: 28/11/2023

## 6.2 Environmental precautions

Do not allow to enter into surface water or drains. ;

## 6.3 Methods and material for containment and cleaning up

For cleaning up: Suitable material for taking up: Absorbing material, organic ;

Other information:

## 6.4 Reference to other sections

Additional information:

## SECTION 7 : HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Protective measures:

Advice on safe handling: Avoid contact with skin, eyes and clothes. ;

Fire preventions:

Do not eat, drink or smoke in areas where reagents are handled. ;

Advice on general occupational hygiene : Handle in accordance with good industrial hygiene and safety practice ;

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

Requirements for storage rooms and vessels: Keep container tightly closed. ;

Hints on storage assembly:

Materials to avoid:

Further information on storage conditions:

### 7.3 Specific end uses:

Recommendations on specific end uses: Observe technical data sheet. ;

## SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Preliminary remark:

#### 8.1.1 Occupational exposure limits:

- OSHA (USA)

Source : Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELS) from 29 CFR 1910.1000						
Substance	EC-No.	CAS-No	OSHA Permissible Exposure Limit (PEL) 8-hour TWA (ppm)	OSHA Permissible Exposure Limit (PEL) 8-hour TWA (mg/m3)	OSHA Permissible Exposure Limit (PEL) STEL (ppm)	OSHA Permissible Exposure Limit (PEL) STEL (mg/m3)
7647-14-5 / 231-598-3	231-598-3	7647-14-5				





according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue dye diluent A (5X) - 8 mL

Version: US, Page 6 of 11, Revision date: 28/11/2023

**8.2 Exposure controls**

8.2.1 Appropriate engineering controls:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See section 7

8.2.2 Personal protective equipment:

Eye / Face protection: Safety glasses with side-shields ;

Skin protection:Gloves ;

Respiratory protection:Ensure adequate ventilation ;

Thermal hazards:

8.2.3 Environmental exposure controls:

Consumer exposure control

Measures related to consumer uses of the substance (as such or in mixtures):

Measures related to the service life of the substance in articles:

**SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties**

Appearance

Physical state	Liquid ;
Colour	Colorless ;
Odour	
Odour threshold (ppm)	

	Value	Concentration (mol/L)	Method	Temperature (°C)	Pressure (kPa)	Remark
pH	7,2					
Melting point (°C)						
Freezing point (°C)						
Initial boiling point/boiling range (°C)						
Flash point (°C)						
Evaporation rate (kg/m <sup>2</sup> /h)						
Flammability (type : ) (%)						
Upper/lower flammability or explosive limits	Upper explosive limit (%)					
	Lower explosive limit (%)					
Vapour pressure (kPa)						
Vapour density (g/cm <sup>3</sup> )						
Densities	Density (g/cm <sup>3</sup> )					
	Relative density (g/cm <sup>3</sup> )					
	Bulk density (g/cm <sup>3</sup> )					
	Critical density (g/cm <sup>3</sup> )					
Solubility (Type : ) (g/L)						
Partition coefficient (log Pow) n-octanol/water at pH :						
Auto-ignition temperature (°C)						
Decomposition temperature (°C)						
Decomposition energy : kj						
Viscosity	Viscosity, dynamic (poiseuille)					
	Viscosity, cinematic (cm <sup>2</sup> /s)					
Explosive properties						
Oxidising properties						

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue dye diluent A (5X) - 8 mL

Version: US, Page 7 of 11, Revision date: 28/11/2023

## 9.2 Other information:

No other relevant data available

## SECTION 10 : STABILITY AND REACTIVITY

### 10.1 Reactivity

This material is considered to be non-reactive under normal use conditions. ;

### 10.2 Chemical stability

### 10.3 Possibility of hazardous reactions

### 10.4 Conditions to avoid:

### 10.5 Incompatible materials:

### 10.6 Hazardous decomposition products:

Does not decompose when used for intended uses. ;

## SECTION 11 : TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution

### 11.1 Information on toxicological effects

#### Substances

- **Acute toxicity**

#### Animal data:

Acute oral toxicity:

Acute dermal toxicity:

Acute inhalative toxicity:

Practical experience / human evidence:

Assessment / Classification:

General Remark:

- **Skin corrosion/irritation**

#### Animal data:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue dye diluent A (5X) - 8 mL

Version: US, Page 8 of 11, Revision date: 28/11/2023

In-vitro skin test method:

In-vitro skin test result:

Assessment / Classification:

- **Eye damage/irritation**

Animal data:

In vitro eye test method:

In vitro eye test result:

Assessment / Classification:

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
  - Germ cell mutagenicity:

Animal data:

Assessment / Classification:

- Carcinogenicity

Practical experience / human evidence:

Animal data:

Other information:

Assessment / Classification:

- Reproductive toxicity

Practical experience / human evidence:

Animal data:

Other information:

Assessment / Classification:

Overall assessment on CMR properties:

- **Specific target organ toxicity (single exposure)**
  - STOT SE 1 and 2

Animal data:

Other information:

- STOT SE 3

Practical experience / human evidence:

Other information:

Assessment / Classification:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue dye diluent A (5X) - 8 mL

Version: US, Page 9 of 11, Revision date: 28/11/2023

- **Specific target organ toxicity (repeated exposure)**

Practical experience / human evidence:

Animal data:

Assessment / Classification:

Other information

- **Aspiration hazard**

Practical experience / human evidence:

Experimental data: viscosity data: see SECTION 9.

Assessment / Classification:

Remark:

#### 11.1.1 Mixtures

No toxicological information is available for the mixture itself

## SECTION 12 : ECOLOGICAL INFORMATION

In case that test data regarding one endpoint/differentiation exist for the mixture itself, the classification is carried out according to the substance criteria (excluding biodegradation and bioaccumulation). If no test data exist, the criteria for mixture classification has to be used (calculation method) in this case the toxicological data of the ingredients are shown.

### 12.1 **Aquatic toxicity:**

Acute (short-term) fish toxicity

Chronic (long-term) fish toxicity

Acute (short-term) toxicity to crustacea

Chronic (long-term) toxicity to crustacea

Acute (short-term) toxicity to algae and cyanobacteria

Toxicity to microorganisms and other aquatic plants / organisms

Assessment / Classification:

### 12.2 **Persistence and degradability**

Biodegradation:

Abiotic Degradation:

Assessment / Classification:

### 12.3 **Bioaccumulative potential**

Bioconcentration factor (BCF):

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue dye diluent A (5X) - 8 mL

Version: US, Page 10 of 11, Revision date: 28/11/2023

**12.4 Mobility in soil**

**12.5 Results of PBT and vPvB assessment**

**12.6 Other adverse effects:**

Additional ecotoxicological information:

**SECTION 13 : DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods**

Waste treatment options:

Dispose of waste according to applicable legislation. ;

Other disposal recommendations:

Additional information:

**SECTION 14 : TRANSPORT INFORMATION**

ADR/RID/AND/IMDG/IATA

UN No.	
UN Proper shipping name	
Transport hazard class(es)	
Hazard label(s)	
Packing group	

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Land transport (ADR/RID)

Classification code ADR:

Special Provisions for ADR/RID:

Limited quantities for ADR/RID:

Excepted Quantities for ADR/RID:

Packing Instructions for ADR/RID:

Special packing provisions for ADR/RID:

Mixed packing provisions:

Portable tanks and bulk containers Instructions:

Portable tanks and bulk containers Special Provisions:

ADR Tank Code:

ADR Tank special provisions:

Vehicle for tank carriage:

Special provisions for carriage Packages:

Special provisions for carriage Bulk:

Special provisions for carriage for loading, unloading and handling:

Special Provisions for carriage Operation:

Hazard identification No:

Transport category (Tunnel restriction code):

Sea transport (IMDG)

Marine Pollutant:

Subsidiary risk(s) for IMDG:

Packing provisions for IMDG:

Limited quantities for IMDG:

Packing instructions for IMDG:

IBC Instructions:

IBC Provisions:

IMO tank instructions:

UN tank instructions:

Tanks and bulk Provisions:

EmS :

Stowage and segregation for IMDG:

Properties and observations:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue dye diluent A (5X) - 8 mL

Version: US, Page 11 of 11, Revision date: 28/11/2023

#### Inland waterway transport (ADN)

Classification Code ADN:

Limited quantities ADN:

Carriage permitted:

Provisions concerning loading and unloading:

Provisions concerning carriage:

Remark:

Special Provisions ADN:

Excepted quantities ADN:

Equipment required:

Number of blue cones/lights:

#### Air transport (ICAO-TI / IATA-DGR)

Subsidiary risk for IATA:

Excepted quantity for IATA:

Passenger and Cargo Aircraft Limited Quantities Packing Instructions:

Passenger and Cargo Aircraft Limited Quantities Maximal Net Quantity :

Passenger and Cargo Aircraft Packaging Instructions :

Passenger and Cargo Aircraft Maximal Net Quantity :

Cargo Aircraft only Packaging Instructions :

Cargo Aircraft only Maximal Net Quantity :

ERG code:

Special Provisions for IATA:

## SECTION 15 : REGULATORY INFORMATION

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

### **15.2 Chemical Safety Assessment:**

For the following substances of this mixture a chemical safety assessment has been carried out :

## SECTION 16 : OTHER INFORMATION

### **16.1 Indication of changes**

Date of the previous version:24/10/2023

Modifications:

### **16.2 Abbreviations and acronyms:**

### **16.3 Key literature references and sources for data**

### **16.4 Classification for mixtures and used evaluation method according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g):**

See SECTION 2.1 (classification).

### **16.5 Relevant R-, H- and EUH-phrases (number and full text):**

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Permeabilization - 0,5% Triton Solution 25mL Unit

Version: US, Page 1 of 14, Revision date: 15/12/2023

## SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifier:

**Designation / Trade name: PhenoVue Permeabilization - 0,5% Triton Solution 25mL Unit**

CAS No.:

Index No:

EC No:

REACH No:

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

Relevant identified uses: Use of the substance or mixture for Laboratory Research use only ;

Uses advised against: Do not use for diagnostics, therapeutics or other clinical uses. ;

### 1.3 Details of the supplier of the safety data sheet:

#### Supplier:

Name: CISBIO BIOASSAYS, company of Revvity Group - CBBIOA -

Address: Parc Marcel Boiteux - BP 84175 - 30200 Codolet, France

Phone : +33 4 66 79 67 05 - Fax : +33 4 66 79 67 50

E-Mail (competent person):  codolet.sds@revvity.com

### 1.4 EMERGENCY TELEPHONE NUMBER:

France - Numéro ORFILA (INRS) : + 33 (0)1 45 42 59 59

Ce numéro permet d'obtenir les coordonnées de tous les centres Anti-poison Français. Ces centres anti-poison et de toxicovigilance fournissent une aide médicale gratuite (hors coût d'appel), 24 heures sur 24 et 7 jours sur 7.

USA & Canada - Phone: 1-888-963-456 (1)

Other countries - Phone: +33 (0) 466 796 737 (2)

<https://www.cisbio.com>

<https://www.revvity.com>

(1) Available from Monday to Thursday 8:30 am to 5:30pm GMT-5 and Friday: 8:30 am to 3:00pm GMT-5

(2) Available from Monday to Friday 9:00 am to 5:30 pm GMT+2

## SECTION 2 : HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture:

Classification in accordance with 29 CFR 1910 (OSHA HCS)	Category code	Hazard statement	Precautionary statement
Hazardous to the aquatic environment - Aquatic Chronic 3 - H412	Aquatic Chronic 3	H412	P273 P501

### 2.2 Label elements

Labelling according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

#### Product identifier:

Designation / Trade name: PhenoVue Permeabilization - 0,5% Triton Solution 25mL Unit

Substances contained in this product:



according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Permeabilization - 0,5% Triton Solution 25mL Unit

Version: US, Page 2 of 14, Revision date: 15/12/2023

---

#### Hazard pictograms

Signal word:

#### Hazard and precautionary statements:

Code	Hazard statments
H412	Harmful to aquatic life with long lasting effects
P273	Avoid release to the environment.
P501	Dispose of contents/container to ...

### **2.3 Other hazards**

The mixture contains substances classified as 'Substances of Very High Concern' (SVHC) published by the European CHemicals Agency (ECHA) under article 57 of REACH at levels of 0.1% or higher. This substance or mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher ;

Adverse human health effects:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Permeabilization - 0,5% Triton Solution 25mL Unit

Version: US, Page 3 of 14, Revision date: 15/12/2023

## SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

Hazardous ingredients:

Substance name	CAS n°	Index n°	EC n°	Classification in accordance with 29 CFR 1910 (OSHA HCS)	Concentration (%)	SCL	M-factor
sodium chloride	7647-14-5		231-598-3		< 1%		
Poly(oxy-1,2-ethanediyl), α-[4-(1,1,3,3-tetramethylbutyl)phenyl]- ω-hydroxy-	9002-93-1			Acute toxicity - Acute Tox. 4 - H302 - Oral Hazardous to the aquatic environment - Aquatic Acute 1 - H400 Hazardous to the aquatic environment - Aquatic Chronic 1 - H410 Serious eye damage/eye irritation - Eye Dam. 1 - H318 Skin corrosion/irritation - Skin Irrit. 2 - H315	< 1%		
sodium azide	26628-22-8	011-004-00-7	247-852-1	Acute toxicity - Acute Tox. 2 - H300 - Oral Hazardous to the aquatic environment - Aquatic Acute 1 - H400 Hazardous to the aquatic environment - Aquatic Chronic 1 - H410	< 1%		
potassium dihydrogenorthophosphate	7778-77-0		231-913-4		< 1%		

Additional information:

Full text of H- and EUH-phrases: see SECTION 16.

## SECTION 4 : FIRST AID MEASURES

### 4.1 Description of first aid measures

**General information:** Do not leave affected person unattended. ;

**Following inhalation:** In case of respiratory tract irritation, consult a physician. ;

**Following skin contact:**After contact with skin, wash immediately with water ;

**Following eye contact:** After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. ;

**Following ingestion:** Do NOT induce vomiting. ;

**Self-protection of the first aider:**

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

Symptoms: No known symptoms to date. ;

Effects:

### 4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Permeabilization - 0,5% Triton Solution 25mL Unit

Version: US, Page 4 of 14, Revision date: 15/12/2023

## SECTION 5 : FIREFIGHTING MEASURES

### 5.1 Extinguishing media:

Suitable extinguishing media: This product is not flammable. Use extinguishing agent suitable for type of surrounding fire ;

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

Hazardous combustion products: /

### 5.3 Advice for fire-fighters

Wear Protective clothing. ;

Additional information:

## SECTION 6 : ACCIDENTAL RELEASE MEASURES

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

Emergency procedures: Provide adequate ventilation. ;

### 6.2 Environmental precautions

Do not allow to enter into surface water or drains. ;

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

For cleaning up: Suitable material for taking up: Absorbing material, organic ;

Other information:

### 6.4 Reference to other sections

Additional information:

## SECTION 7 : HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Protective measures:

Advice on safe handling: Avoid contact with skin, eyes and clothes. ;

Fire preventions:

Do not eat, drink or smoke in areas where reagents are handled. ;

Advice on general occupational hygiene: Handle in accordance with good industrial hygiene and safety practice ;

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

Requirements for storage rooms and vessels: Keep container tightly closed. ;

Hints on storage assembly:

Materials to avoid:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Permeabilization - 0,5% Triton Solution 25mL Unit

Version: US, Page 5 of 14, Revision date: 15/12/2023

Further information on storage conditions:

**7.3 Specific end uses:**

Recommendations on specific end uses: Observe technical data sheet. ;

**SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters**

Preliminary remark:

8.1.1 Occupational exposure limits:

- OSHA (USA)

Source : Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELS) from 29 CFR 1910.1000						
Substance	EC-No.	CAS-No	OSHA Permissible Exposure Limit (PEL) 8-hour TWA (ppm)	OSHA Permissible Exposure Limit (PEL) 8-hour TWA (mg/m3)	OSHA Permissible Exposure Limit (PEL) STEL (ppm)	OSHA Permissible Exposure Limit (PEL) STEL (mg/m3)
26628-22-8 / 247-852-1	247-852-1	26628-22-8				
7647-14-5 / 231-598-3	231-598-3	7647-14-5				
7778-77-0 / 231-913-4	231-913-4	7778-77-0				

Source : TRGS 903, November 2015, BAuA				
Substance	EC-No.	CAS-No	BGW (mg/m3)	BGW (ppm)
26628-22-8 / 247-852-1	247-852-1	26628-22-8		
7647-14-5 / 231-598-3	231-598-3	7647-14-5		
7778-77-0 / 231-913-4	231-913-4	7778-77-0		

8.1.2 DNEL/PNEC-values:

- DNEL worker

Source : GESTIS – substance database									
Substance	EC-No.	CAS-No	Acute – dermal, local effects (mg/kg/day)	Long-term – dermal, local effects (mg/kg/day)	Long-term – dermal, systemic effects (mg/kg/day)	Acute – inhalation, local effects (mg/m3)	Acute – inhalation, systemic effects (mg/m3)	Long-term – inhalation, local effects (mg/m3)	Long-term – inhalation, systemic effects (mg/m3)
26628-22-8 / 247-852-1	247-852-1	26628-22-8							
7647-14-5 / 231-598-3	231-598-3	7647-14-5					2068.62-2068.62		
7778-77-0 / 231-913-4	231-913-4	7778-77-0					4.07-4.07		



according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Permeabilization - 0,5% Triton Solution 25mL Unit

Version: US, Page 7 of 14, Revision date: 15/12/2023

## 8.2 Exposure controls

### 8.2.1 Appropriate engineering controls:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See section 7

### 8.2.2 Personal protective equipment:

Eye / Face protection: Safety glasses with side-shields ;

Skin protection:Gloves ;

Respiratory protection:Ensure adequate ventilation ;

Thermal hazards:

### 8.2.3 Environmental exposure controls:

Consumer exposure control

Measures related to consumer uses of the substance (as such or in mixtures):

Measures related to the service life of the substance in articles:

## SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

#### Appearance

Physical state	Liquid ;
Colour	Colorless ;
Odour	
Odour threshold (ppm)	

	Value	Concentration (mol/L)	Method	Temperature (°C)	Pressure (kPa)	Remark
pH	7,4					
Melting point (°C)						
Freezing point (°C)						
Initial boiling point/boiling range (°C)						
Flash point (°C)						
Evaporation rate (kg/m <sup>2</sup> /h)						
Flammability (type : ) (%)						
Upper/lower flammability or explosive limits	Upper explosive limit (%)					
	Lower explosive limit (%)					
Vapour pressure (kPa)						
Vapour density (g/cm <sup>3</sup> )						
Densities	Density (g/cm <sup>3</sup> )					
	Relative density (g/cm <sup>3</sup> )					
	Bulk density (g/cm <sup>3</sup> )					
	Critical density (g/cm <sup>3</sup> )					
Solubility (Type : ) (g/L)						
Partition coefficient (log Pow) n-octanol/water at pH :						
Auto-ignition temperature (°C)						
Decomposition temperature (°C) Decomposition energy : kJ						
Viscosity	Viscosity, dynamic (poiseuille)					
	Viscosity, cinematic (cm <sup>2</sup> /s)					
Explosive properties						
Oxidising properties						

### 9.2 Other information:

No other relevant data available

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Permeabilization - 0,5% Triton Solution 25mL Unit

Version: US, Page 8 of 14, Revision date: 15/12/2023

## SECTION 10 : STABILITY AND REACTIVITY

### 10.1 Reactivity

This material is considered to be non-reactive under normal use conditions. ;

### 10.2 Chemical stability

### 10.3 Possibility of hazardous reactions

### 10.4 Conditions to avoid:

### 10.5 Incompatible materials:

### 10.6 Hazardous decomposition products:

Does not decompose when used for intended uses. ;

## SECTION 11 : TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution

### 11.1 Information on toxicological effects

#### Substances

- **Acute toxicity**

#### Animal data:

Acute oral toxicity:

Substance name	LD50 (mg/kg)	Species	Method	Symptoms / delayed effects	Remark
9002-93-1	1800-1800	Rat			

Acute dermal toxicity:

Acute inhalative toxicity:

Practical experience / human evidence:

Assessment / Classification:

General Remark:

- **Skin corrosion/irritation**

#### Animal data:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Permeabilization - 0,5% Triton Solution 25mL Unit

Version: US, Page 9 of 14, Revision date: 15/12/2023

Substance name	Species	Method	Exposure time	Result/evaluation	Score	Remark
9002-93-1						

In-vitro skin test method:

In-vitro skin test result:

Assessment / Classification:

- **Eye damage/irritation**

Animal data:

Substance name	Species	Method	Exposure time	Result/evaluation	Score	Remark
9002-93-1	Rabbit			Eye irritation		

In vitro eye test method:

In vitro eye test result:

Assessment / Classification:

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
  - Germ cell mutagenicity:

Animal data:

Assessment / Classification:

- Carcinogenicity

Practical experience / human evidence:

Animal data:

Other information:

Assessment / Classification:

- Reproductive toxicity

Practical experience / human evidence:

Animal data:

Other information:

Assessment / Classification:

Overall assessment on CMR properties:

- **Specific target organ toxicity (single exposure)**
  - STOT SE 1 and 2

Animal data:

Other information:



according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Permeabilization - 0,5% Triton Solution 25mL Unit

Version: US, Page 10 of 14, Revision date: 15/12/2023

- STOT SE 3

Practical experience / human evidence:

Other information:

Assessment / Classification:

- **Specific target organ toxicity (repeated exposure)**

Practical experience / human evidence:

Animal data:

Assessment / Classification:

Other information

- **Aspiration hazard**

Practical experience / human evidence:

Experimental data: viscosity data: see SECTION 9.

Assessment / Classification:

Remark:

11.1.1 Mixtures

No toxicological information is available for the mixture itself

**SECTION 12 : ECOLOGICAL INFORMATION**

In case that test data regarding one endpoint/differentiation exist for the mixture itself, the classification is carried out according to the substance criteria (excluding biodegradation and bioaccumulation). If no test data exist, the criteria for mixture classification has to be used (calculation method) in this case the toxicological data of the ingredients are shown.

**12.1 Aquatic toxicity:**

Acute (short-term) fish toxicity

Source : Informations relatives à la réglementation VME (France) : ED 984, 07.2012										
Substance	EC-No.	CAS-No	LC50 (mg/L)	EC50 (mg/L)	Test duration	Species	Result/Evaluation	Method	Remark	General Remark
9002-93-1		9002-93-1	8,9		96	Pimephales promelas (fathead minnow)				

Chronic (long-term) fish toxicity

Source : Informations relatives à la réglementation VME (France) : ED 984, 07.2012									
Substance	EC-No.	CAS-No	NOEC (mg/L)	Test duration	Species	Method	Remark	General Remark	
9002-93-1		9002-93-1							

Acute (short-term) toxicity to crustacea

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Permeabilization - 0,5% Triton Solution 25mL Unit

Version: US, Page 11 of 14, Revision date: 15/12/2023

Source :	Informations relatives à la réglementation VME (France) : ED 984, 07.2012								
Substance	EC-No.	CAS-No	EC50 (mg/L)	Test duration	Species	Result/Evaluation	Method	Remark	General Remark
9002-93-1		9002-93-1	26	48					

Chronic (long-term) toxicity to crustacea

Source :	Informations relatives à la réglementation VME (France) : ED 984, 07.2012								
Substance	EC-No.	CAS-No	NOEC (mg/L)	Test duration	Species	Method	Remark	General Remark	
9002-93-1		9002-93-1							

Acute (short-term) toxicity to algae and cyanobacteria

Source :	Informations relatives à la réglementation VME (France) : ED 984, 07.2012								
Substance	EC-No.	CAS-No	EC50 (mg/L)	Test duration	Species	Result/Evaluation	Method	Remark	General Remark
9002-93-1		9002-93-1							

Toxicity to microorganisms and other aquatic plants / organisms

Source :	Informations relatives à la réglementation VME (France) : ED 984, 07.2012								
Substance	EC-No.	CAS-No	EC50 (mg/L)	Species	Method	Remark	General Remark		
9002-93-1		9002-93-1							

Assessment / Classification:

**12.2 Persistence and degradability**

Biodegradation:

Source :	Informations relatives à la réglementation VME (France) : ED 984, 07.2012						
Substance	EC-No.	CAS-No	Inoculum	Biodegradation parameter	Degradation rate (%)	Method	Remark
9002-93-1		9002-93-1		BOD (% of COD).	36-36		In accordance with the required stability the product is poorly biodegradable.

Abiotic Degradation:

Source :								
Substance	EC-No.	CAS-No	Abiotic degradation test type	Half-life time (j)	Temperature (°C)	pH	Method	Remark
9002-93-1		9002-93-1						

Assessment / Classification:

**12.3 Bioaccumulative potential**

Bioconcentration factor (BCF):

Source :	
----------	--

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Permeabilization - 0,5% Triton Solution 25mL Unit

Version: US, Page 12 of 14, Revision date: 15/12/2023

Substance	EC-No.	CAS-No	Species	Result	Method	Remark
9002-93-1		9002-93-1				

**12.4 Mobility in soil**

Substance	EC n°	CAS n°	Distribution	Transport type	Henry's law constant (Pa.m3/mol)	Log KOC	Half-life time in soil (j)	Half-life time in fresh water (j)	Half-life time in sea water (j)	Method	Remark
9002-93-1		9002-93-1									

**12.5 Results of PBT and vPvB assessment**

**12.6 Other adverse effects:**

Additional ecotoxicological information:

**SECTION 13 : DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods**

Waste treatment options:

Dispose of waste according to applicable legislation. ;

Other disposal recommendations:

Additional information:

**SECTION 14 : TRANSPORT INFORMATION**

ADR/RID/AND/IMDG/IATA

UN No.	
UN Proper shipping name	
Transport hazard class(es)	
Hazard label(s)	
Packing group	

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Land transport (ADR/RID)

Classification code ADR:

Limited quantities for ADR/RID:

Packing Instructions for ADR/RID:

Special packing provisions for ADR/RID:

Mixed packing provisions:

Portable tanks and bulk containers Special Provisions:

ADR Tank Code:

Vehicle for tank carriage:

Special provisions for carriage Bulk:

Special Provisions for ADR/RID:

Excepted Quantities for ADR/RID:

Portable tanks and bulk containers Instructions:

ADR Tank special provisions:

Special provisions for carriage Packages:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Permeabilization - 0,5% Triton Solution 25mL Unit

Version: US, Page 13 of 14, Revision date: 15/12/2023

Special provisions for carriage for loading, unloading and handling:

Special Provisions for carriage Operation:

Hazard identification No:

Transport category (Tunnel restriction code):

#### Sea transport (IMDG)

Marine Pollutant:

Subsidiary risk(s) for IMDG:

Packing provisions for IMDG:

Limited quantities for IMDG:

Packing instructions for IMDG:

IBC Instructions:

IBC Provisions:

IMO tank instructions:

UN tank instructions:

Tanks and bulk Provisions:

EmS :

Stowage and segregation for IMDG:

Properties and observations:

#### Inland waterway transport (ADN)

Classification Code ADN:

Special Provisions ADN:

Limited quantities ADN:

Excepted quantities ADN:

Carriage permitted:

Equipment required:

Provisions concerning loading and unloading:

Provisions concerning carriage:

Number of blue cones/lights:

Remark:

#### Air transport (ICAO-TI / IATA-DGR)

Subsidiary risk for IATA:

Excepted quantity for IATA:

Passenger and Cargo Aircraft Limited Quantities Packing Instructions:

Passenger and Cargo Aircraft Limited Quantities Maximal Net Quantity :

Passenger and Cargo Aircraft Packaging Instructions :

Passenger and Cargo Aircraft Maximal Net Quantity :

Cargo Aircraft only Packaging Instructions :

Cargo Aircraft only Maximal Net Quantity :

ERG code:

Special Provisions for IATA:

## SECTION 15 : REGULATORY INFORMATION

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

### 15.2 Chemical Safety Assessment:

For the following substances of this mixture a chemical safety assessment has been carried out :

## SECTION 16 : OTHER INFORMATION

### 16.1 Indication of changes

Date of the previous version:13/10/2023

Modifications:

### 16.2 Abbreviations and acronyms:

### 16.3 Key literature references and sources for data

### 16.4 Classification for mixtures and used evaluation method according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g):

See SECTION 2.1 (classification).

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Permeabilization - 0,5% Triton Solution 25mL Unit

Version: US, Page 14 of 14, Revision date: 15/12/2023

**16.5 Relevant R-, H- and EUH-phrases (number and full text):**

Code	Hazard statements
H300	Fatal if swallowed
H302	Harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage.
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Paraformaldehyde - 4% Solution 25mL Unit

Version: US, Page 1 of 14, Revision date: 13/10/2023

## SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifier:

**Designation / Trade name: PhenoVue Paraformaldehyde - 4% Solution 25mL Unit**

CAS No.:

Index No:

EC No:

REACH No:

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

Relevant identified uses: Use of the substance or mixture for Laboratory Research use only ;

Uses advised against: Do not use for diagnostics, therapeutics or other clinical uses. ;

### 1.3 Details of the supplier of the safety data sheet:

#### Supplier:

Name: CISBIO BIOASSAYS, company of Revvity Group - CBBIOA -

Address: Parc Marcel Boiteux - BP 84175 - 30200 Codolet, France

Phone : +33 4 66 79 67 05 - Fax : +33 4 66 79 67 50

E-Mail (competent person):  codolet.sds@revvity.com

### 1.4 EMERGENCY TELEPHONE NUMBER:

France - Numéro ORFILA (INRS) : + 33 (0)1 45 42 59 59

Ce numéro permet d'obtenir les coordonnées de tous les centres Anti-poison Français. Ces centres anti-poison et de toxicovigilance fournissent une aide médicale gratuite (hors coût d'appel), 24 heures sur 24 et 7 jours sur 7.

USA & Canada - Phone: 1-888-963-456 (1)

Other countries - Phone: +33 (0) 466 796 737 (2)

<https://www.cisbio.com>

<https://www.revvity.com>

(1) Available from Monday to Thursday 8:30 am to 5:30pm GMT-5 and Friday: 8:30 am to 3:00pm GMT-5

(2) Available from Monday to Friday 9:00 am to 5:30 pm GMT+2

## SECTION 2 : HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture:

Classification in accordance with 29 CFR 1910 (OSHA HCS)	Category code	Hazard statement	Precautionary statement
Respiratory/skin sensitization - Skin Sens. 1 - H317	Skin Sens. 1	H317	P261 P272 P280 P302 + P352 P321 P333 + P313 P362 + P364 P501
Serious eye damage/eye irritation - Eye Irrit. 2 - H319	Eye Irrit. 2	H319	P264 P280 P305 + P351 + P338 P337 + P313
Skin corrosion/irritation - Skin Irrit. 2 - H315	Skin Irrit. 2	H315	P264 P280 P302 + P352 P321 P332 + P313 P362 + P364
Specific target organ toxicity - single exposure - STOT SE 3 - H336	STOT SE 3	H336	P261 P271 P304 + P340 P312 P403 + P233 P405 P501

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Paraformaldehyde - 4% Solution 25mL Unit

Version: US, Page 2 of 14, Revision date: 13/10/2023

## 2.2 Label elements

Labelling according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

### Product identifier:

Designation / Trade name: PhenoVue Paraformaldehyde - 4% Solution 25mL Unit

Substances contained in this product:

Substance name	CAS n°	Index n°	EC n°
Formaldehyde	50-00-0	605-001-00-5	200-001-8

### Hazard pictograms

GHS07-exclam



### Signal word:

Warning

### Hazard and precautionary statements:

Code	Hazard statments
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash ... thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302 + P352	IF ON SKIN: Wash with plenty of water/...
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTRE/doctor/... if you feel unwell.
P321	Specific treatment (see ... on this label).
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container to ...

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Paraformaldehyde - 4% Solution 25mL Unit

Version: US, Page 3 of 14, Revision date: 13/10/2023

---

### **2.3 Other hazards**

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC)  $\geq 0.1\%$  published by the European Chemicals Agency (ECHA) under article 57 of REACH. The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006. ;

Adverse human health effects:



according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Paraformaldehyde - 4% Solution 25mL Unit

Version: US, Page 4 of 14, Revision date: 13/10/2023

## SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

#### Hazardous ingredients:

Substance name	CAS n°	Index n°	EC n°	Classification in accordance with 29 CFR 1910 (OSHA HCS)	Concentration (%)	SCL	M-factor
Formaldehyde	50-00-0	605-001-00-5	200-001-8	Acute toxicity - Acute Tox. 3 - H301 - Oral Acute toxicity - Acute Tox. 3 - H311 - Dermal Acute toxicity - Acute Tox. 3 - H331 - Inhalation Carcinogenicity - Carc. 1B - H350 Germ cell mutagenicity - Muta. 2 - H341 Respiratory/skin sensitization - Skin Sens. 1 - H317 Skin corrosion/irritation - Skin Corr. 1B - H314 Specific target organ toxicity - single exposure - STOT SE 3 - H335	< 25 %	STOT SE 3 H335: C ≥ 5 %  Skin Corr. 1B H314: C ≥ 25 %  Skin Irrit. 2 H315: 5 % ≤ C < 25 %  Eye Irrit. 2 H319: 5 % ≤ C < 25 %  Skin Sens. 1 H317: C ≥ 0,2 %	
sodium chloride	7647-14-5		231-598-3		< 1%		
potassium dihydrogenorthophosphate	7778-77-0		231-913-4		< 1%		

#### Additional information:

Full text of H- and EUH-phrases: see SECTION 16.

## SECTION 4 : FIRST AID MEASURES

### 4.1 Description of first aid measures

**General information:** Do not leave affected person unattended. ;

**Following inhalation:** In case of respiratory tract irritation, consult a physician. ;

**Following skin contact:**After contact with skin, wash immediately with water ;

**Following eye contact:** After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. ;

**Following ingestion:** Do NOT induce vomiting. ;

**Self-protection of the first aider:**

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

Symptoms: No known symptoms to date. ;

Effects:

### 4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor:

## SECTION 5 : FIREFIGHTING MEASURES

### 5.1 Extinguishing media:

Suitable extinguishing media: This product is not flammable. Use extinguishing agent suitable for type of surrounding fire ;

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Paraformaldehyde - 4% Solution 25mL Unit

Version: US, Page 5 of 14, Revision date: 13/10/2023

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

Hazardous combustion products: /

### 5.3 *Advice for fire-fighters*

Wear Protective clothing. ;

Additional information:

## SECTION 6 : ACCIDENTAL RELEASE MEASURES

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

Emergency procedures: Provide adequate ventilation. ;

### 6.2 *Environmental precautions*

Do not allow to enter into surface water or drains. ;

### 6.3 *Methods and material for containment and cleaning up*

For cleaning up: Suitable material for taking up: Absorbing material, organic ;

Other information:

### 6.4 *Reference to other sections*

Additional information:

## SECTION 7 : HANDLING AND STORAGE

### 7.1 *Precautions for safe handling*

Protective measures:

Advice on safe handling: Avoid contact with skin, eyes and clothes. ;

Fire preventions:

Do not eat, drink or smoke in areas where reagents are handled. ;

Advice on general occupational hygiene: Handle in accordance with good industrial hygiene and safety practice ;

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

Requirements for storage rooms and vessels: Keep container tightly closed. ;

Hints on storage assembly:

Materials to avoid:

Further information on storage conditions:

### 7.3 *Specific end uses:*

Recommendations on specific end uses: Observe technical data sheet. ;

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Paraformaldehyde - 4% Solution 25mL Unit

Version: US, Page 6 of 14, Revision date: 13/10/2023

## SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Preliminary remark:

#### 8.1.1 Occupational exposure limits:

- OSHA (USA)

Source : Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELS) from 29 CFR 1910.1000						
Substance	EC-No.	CAS-No	OSHA Permissible Exposure Limit (PEL) 8-hour TWA (ppm)	OSHA Permissible Exposure Limit (PEL) 8-hour TWA (mg/m <sup>3</sup> )	OSHA Permissible Exposure Limit (PEL) STEL (ppm)	OSHA Permissible Exposure Limit (PEL) STEL (mg/m <sup>3</sup> )
50-00-0 / 200-001-8	200-001-8	50-00-0	0,75		2	
7647-14-5 / 231-598-3	231-598-3	7647-14-5				
7778-77-0 / 231-913-4	231-913-4	7778-77-0				

Source : TRGS 903, November 2015, BAuA				
Substance	EC-No.	CAS-No	BGW (mg/m <sup>3</sup> )	BGW (ppm)
50-00-0 / 200-001-8	200-001-8	50-00-0		
7647-14-5 / 231-598-3	231-598-3	7647-14-5		
7778-77-0 / 231-913-4	231-913-4	7778-77-0		

#### 8.1.2 DNEL/PNEC-values:

- DNEL worker

Source : GESTIS – substance database									
Substance	EC-No.	CAS-No	Acute – dermal, local effects (mg/kg/day)	Long-term – dermal, local effects (mg/kg/day)	Long-term – dermal, systemic effects (mg/kg/day)	Acute – inhalation, local effects (mg/m <sup>3</sup> )	Acute – inhalation, systemic effects (mg/m <sup>3</sup> )	Long-term – inhalation, local effects (mg/m <sup>3</sup> )	Long-term – inhalation, systemic effects (mg/m <sup>3</sup> )
50-00-0 / 200-001-8	200-001-8	50-00-0				0.5-0.5	9-9		
7647-14-5 / 231-598-3	231-598-3	7647-14-5					2068.62-2068.62		
7778-77-0 / 231-913-4	231-913-4	7778-77-0					4.07-4.07		

- DNEL consumer

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Paraformaldehyde - 4% Solution 25mL Unit

Version: US, Page 7 of 14, Revision date: 13/10/2023

Source : GESTIS – substance database									
Substance	EC-No.	CAS-No	Acute – dermal, local effects (mg/kg/day)	Long-term – dermal, local effects (mg/kg/day)	Long-term – dermal, systemic effects (mg/kg/day)	Acute – inhalation, local effects (mg/m3)	Acute – inhalation, systemic effects (mg/m3)	Long-term – inhalation, local effects (mg/m3)	Long-term – inhalation, systemic effects (mg/m3)
50-00-0 / 200-001-8	200-001-8	50-00-0							
7647-14-5 / 231-598-3	231-598-3	7647-14-5							
7778-77-0 / 231-913-4	231-913-4	7778-77-0							

- PNEC

Source : INERIS																
Substance	EC-No.	CAS-No	PNEC AQUATIC									PNEC Sediment				
			freshwater			marine water			intermittent release			freshwater			marine water	
			(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)
50-00-0 / 200-001-8	200-001-8	50-00-0														
7647-14-5 / 231-598-3	231-598-3	7647-14-5														
7778-77-0 / 231-913-4	231-913-4	7778-77-0														

Source : INERIS														
Substance	EC-No.	CAS-No	Others											
			PNEC soil			PNEC sewage treatment plant			PNEC air			PNEC secondary poisoning		
			(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)
50-00-0 / 200-001-8	200-001-8	50-00-0												
7647-14-5 / 231-598-3	231-598-3	7647-14-5												
7778-77-0 / 231-913-4	231-913-4	7778-77-0												

## 8.2 Exposure controls

### 8.2.1 Appropriate engineering controls:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See section 7

### 8.2.2 Personal protective equipment:

Eye / Face protection: Safety glasses with side-shields ;

Skin protection:Gloves ;

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Paraformaldehyde - 4% Solution 25mL Unit

Version: US, Page 8 of 14, Revision date: 13/10/2023

Respiratory protection: Ensure adequate ventilation ;

Thermal hazards:

8.2.3 Environmental exposure controls:

Consumer exposure control

Measures related to consumer uses of the substance (as such or in mixtures):

Measures related to the service life of the substance in articles:

## SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

#### Appearance

Physical state	Liquid ;
Colour	Colorless ;
Odour	
Odour threshold (ppm)	

	Value	Concentration (mol/L)	Method	Temperature (°C)	Pressure (kPa)	Remark
pH	7,4					
Melting point (°C)						
Freezing point (°C)						
Initial boiling point/boiling range (°C)						
Flash point (°C)						
Evaporation rate (kg/m <sup>2</sup> /h)						
Flammability (type : ) (%)						
Upper/lower flammability or explosive limits	Upper explosive limit (%)					
	Lower explosive limit (%)					
Vapour pressure (kPa)						
Vapour density (g/cm <sup>3</sup> )						
Densities	Density (g/cm <sup>3</sup> )					
	Relative density (g/cm <sup>3</sup> )					
	Bulk density (g/cm <sup>3</sup> )					
	Critical density (g/cm <sup>3</sup> )					
Solubility (Type : ) (g/L)						
Partition coefficient (log Pow) n-octanol/water at pH :						
Auto-ignition temperature (°C)						
Decomposition temperature (°C) Decomposition energy : kJ						
Viscosity	Viscosity, dynamic (poiseuille)					
	Viscosity, cinematic (cm <sup>2</sup> /s)					
Explosive properties						
Oxidising properties						

### 9.2 Other information:

No other relevant data available

## SECTION 10 : STABILITY AND REACTIVITY

### 10.1 Reactivity

This material is considered to be non-reactive under normal use conditions. ;

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Paraformaldehyde - 4% Solution 25mL Unit

Version: US, Page 9 of 14, Revision date: 13/10/2023

## 10.2 Chemical stability

## 10.3 Possibility of hazardous reactions

## 10.4 Conditions to avoid:

## 10.5 Incompatible materials:

## 10.6 Hazardous decomposition products:

Does not decompose when used for intended uses. ;

## SECTION 11 : TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution

### 11.1 Information on toxicological effects

#### Substances

- **Acute toxicity**

#### Animal data:

Acute oral toxicity:

Substance name	LD50 (mg/kg)	Species	Method	Symptoms / delayed effects	Remark
50-00-0 / 200-001-8	592-592	Rat			

Acute dermal toxicity:

Substance name	LD50 (mg/kg)	Species	Method	Remark
50-00-0 / 200-001-8	10000-10000	Rabbit		

Acute inhalative toxicity:

Substance name	C(E)L50 (mg/L)	Exposure time	Species	Method	Remark
50-00-0 / 200-001-8	1.07-1.07	4-4	Rat		May cause respiratory irritation.

Practical experience / human evidence:

Assessment / Classification:

General Remark:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Paraformaldehyde - 4% Solution 25mL Unit

Version: US, Page 10 of 14, Revision date: 13/10/2023

- **Skin corrosion/irritation**

Animal data:

Substance name	Species	Method	Exposure time	Result/evaluation	Score	Remark
50-00-0 / 200-001-8						Prolonged or repeated contact with skin or mucous membrane result in irritation symptoms such as redness, blistering, dermatitis, etc.

In-vitro skin test method:

In-vitro skin test result:

Assessment / Classification:

- **Eye damage/irritation**

Animal data:

Substance name	Species	Method	Exposure time	Result/evaluation	Score	Remark
50-00-0 / 200-001-8						

In vitro eye test method:

In vitro eye test result:

Assessment / Classification:

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

- Germ cell mutagenicity:

Animal data:

Substance name	NOEC	Cell type and organism	Method	Result / Evaluation	Remark
50-00-0 / 200-001-8		mammalian cells (with metabolic activation)		The result is positive	

Assessment / Classification:

- Carcinogenicity

Practical experience / human evidence:

Animal data:

Substance name	NOEC	Exposure route	Exposure time
50-00-0 / 200-001-8			

Other information:

Assessment / Classification:

- Reproductive toxicity

Practical experience / human evidence:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Paraformaldehyde - 4% Solution 25mL Unit

Version: US, Page 11 of 14, Revision date: 13/10/2023

Animal data:

Other information:

Assessment / Classification:

Overall assessment on CMR properties:

- **Specific target organ toxicity (single exposure)**
  - STOT SE 1 and 2

Animal data:

Other information:

- STOT SE 3

Practical experience / human evidence:

Substance name	NOEC
50-00-0 / 200-001-8	

Other information:

Assessment / Classification:

- **Specific target organ toxicity (repeated exposure)**

Practical experience / human evidence:

Animal data:

Assessment / Classification:

Other information

- **Aspiration hazard**

Practical experience / human evidence:

Experimental data: viscosity data: see SECTION 9.

Assessment / Classification:

Remark:

#### 11.1.1 Mixtures

No toxicological information is available for the mixture itself

## SECTION 12 : ECOLOGICAL INFORMATION

In case that test data regarding one endpoint/differentiation exist for the mixture itself, the classification is carried out according to the substance criteria (excluding biodegradation and bioaccumulation). If no test data exist, the criteria for mixture classification has to be used (calculation method) in this case the toxicological data of the ingredients are shown.

### 12.1 **Aquatic toxicity:**

#### Acute (short-term) fish toxicity



according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Paraformaldehyde - 4% Solution 25mL Unit

Version: US, Page 12 of 14, Revision date: 13/10/2023

Chronic (long-term) fish toxicity

Acute (short-term) toxicity to crustacea

Chronic (long-term) toxicity to crustacea

Acute (short-term) toxicity to algae and cyanobacteria

Toxicity to microorganisms and other aquatic plants / organisms

Assessment / Classification:

### **12.2 Persistence and degradability**

Biodegradation:

Abiotic Degradation:

Assessment / Classification:

### **12.3 Bioaccumulative potential**

Bioconcentration factor (BCF):

### **12.4 Mobility in soil**

### **12.5 Results of PBT and vPvB assessment**

### **12.6 Other adverse effects:**

Additional ecotoxicological information:

## **SECTION 13 : DISPOSAL CONSIDERATIONS**

### **13.1 Waste treatment methods**

Waste treatment options:

Dispose of waste according to applicable legislation. ;

Other disposal recommendations:

Additional information:

## **SECTION 14 : TRANSPORT INFORMATION**

ADR/RID/AND/IMDG/IATA

UN No.	
UN Proper shipping name	
Transport hazard class(es)	
Hazard label(s)	

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Paraformaldehyde - 4% Solution 25mL Unit

Version: US, Page 13 of 14, Revision date: 13/10/2023

Packing group	
---------------	--

***Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code***

Land transport (ADR/RID)

Classification code ADR:	Special Provisions for ADR/RID:
Limited quantities for ADR/RID:	Excepted Quantities for ADR/RID:
Packing Instructions for ADR/RID:	
Special packing provisions for ADR/RID:	
Mixed packing provisions:	Portable tanks and bulk containers Instructions:
Portable tanks and bulk containers Special Provisions:	
ADR Tank Code:	ADR Tank special provisions:
Vehicle for tank carriage:	Special provisions for carriage Packages:
Special provisions for carriage Bulk:	
Special provisions for carriage for loading, unloading and handling:	
Special Provisions for carriage Operation:	
Hazard identification No:	Transport category (Tunnel restriction code):

Sea transport (IMDG)

Marine Pollutant:	Subsidiary risk(s) for IMDG:
Packing provisions for IMDG:	Limited quantities for IMDG:
Packing instructions for IMDG:	IBC Instructions:
IBC Provisions:	IMO tank instructions:
UN tank instructions:	Tanks and bulk Provisions:
EmS :	Stowage and segregation for IMDG:
Properties and observations:	

Inland waterway transport (ADN)

Classification Code ADN:	Special Provisions ADN:
Limited quantities ADN:	Excepted quantities ADN:
Carriage permitted:	Equipment required:
Provisions concerning loading and unloading:	
Provisions concerning carriage:	Number of blue cones/lights:
Remark:	

Air transport (ICAO-TI / IATA-DGR)

Subsidiary risk for IATA:	Excepted quantity for IATA:
Passenger and Cargo Aircraft Limited Quantities Packing Instructions:	
Passenger and Cargo Aircraft Limited Quantities Maximal Net Quantity :	
Passenger and Cargo Aircraft Packaging Instructions :	
Passenger and Cargo Aircraft Maximal Net Quantity :	
Cargo Aircraft only Packaging Instructions :	
Cargo Aircraft only Maximal Net Quantity :	
ERG code:	Special Provisions for IATA:

**SECTION 15 : REGULATORY INFORMATION**

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

**15.2 Chemical Safety Assessment:**

For the following substances of this mixture a chemical safety assessment has been carried out :

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: PhenoVue Paraformaldehyde - 4% Solution 25mL Unit

Version: US, Page 14 of 14, Revision date: 13/10/2023

## SECTION 16 : OTHER INFORMATION

### 16.1 Indication of changes

Date of the previous version:07/09/2023

Modifications:

### 16.2 Abbreviations and acronyms:

### 16.3 Key literature references and sources for data

### 16.4 Classification for mixtures and used evaluation method according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g):

See SECTION 2.1 (classification).

### 16.5 Relevant R-, H- and EUH-phrases (number and full text):

Code	Hazard statements
H301	Toxic if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction
H331	Toxic if inhaled
H335	May cause respiratory irritation
H341	Suspected of causing genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
H350	May cause cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)