

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

Trade name: HTRF B-arrestin 2 total kit - 20K pts / 64BAR2TPEC Version: KIT, Page 1 of 1, Revision date: 06/10/2023

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	рН	Color	Physical state
HTRF Lysis buffer (4X) - 130 mL		2	7	Colorless	Liquid
HTRF B-arrestin 2 total kit - Ctrl lys.	64BAR2TTDA	3	7	Colorless	Liquid
HTRF B-arrestin 2 total kit - 20K pts d2 antibody		2	7	Blue	Liquid
HTRF B-arrestin 2 total kit - 20K pts Eu Cryptate antibody		2	7	Colorless	Liquid
HTRF P-T prot Detect. Buf. 50 mL		2	7	Colorless	Liquid



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

Designation / Trade name: HTRF B-arrestin 2 total kit - Ctrl lys. 64BAR2TTDA Version: US, Page 1 of 13, Revision date: 07/09/2023

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

# 1.1 Product identifier:

Designation / Trade name: HTRF B-arrestin 2 total kit - Ctrl lys. 64BAR2TTDA

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: HTRF B-arrestin 2 total kit - Ctrl lys. 64BAR2TTDA

Substances contained in this product:



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Hazard pictograms

Signal word:

Hazard and precautionary statements:

### 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))

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# 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
4-(2- hydroxyethyl)piperazin-1- ylethanesulphonic acid	7365-45-9		230-907-9		< 3%		
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%		

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))

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## 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

<u>Protective measures:</u> 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. ; <u>Advice on general occupational hygiene</u>: Handle in accordance with good industrial hygiene and safety practice ;

## 7.2 Conditions for safe storage, including any incompatibilities

<u>Requirements for storage rooms and vessels</u>: Keep container tightly closed. ; <u>Hints on storage assembly:</u> Materials to avoid: <u>Further information on storage conditions:</u>

## 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))

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# 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)					
7365-45-9 / 230-907- 9	230-907-9	7365-45-9									

Source :	TRGS 903, Novemb	oer 2015, BAuA		
Substance	EC-No.	CAS-No	BGW (mg/m3)	BGW (ppm)
7365-45-9 / 230-907- 9	230-907-9	7365-45-9		

## 8.1.2 DNEL/PNEC-values:

• DNEL worker

Source :	GESTIS – su	bstance dat	abase						
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)	systemic effects
7365-45-9 / 230-907-9	230-907-9	7365-45-9					23.5-23.5		

#### • DNEL consumer

Source :	GESTIS – s	ubstance da	tabase						
Substance	EC-No.	CAS-No	Acute – dermal, local effects (mg/kg/day)	Long-term – dermal, local effects (mg/kg/day)	systemic effects	Acute – inhalation, local effects (mg/m3)	systemic effects	Long-term – inhalation, local effects (mg/m3)	systemic effects
7365-45-9 / 230-907-9	230-907-9	7365-45-9							

PNEC

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

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																$\sim$	r
Source :	INERIS																
	ce EC-No.			PNEC AQUATIC									PNEC Sediment				
Substance		nce EC-No. CAS-No			freshwate	r	m	arine wat	intermittent release		lease	freshwater		er	marine water		ter
			(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)
7365-45-9 / 230-907- 9	230-907-9	7365-45-9															

Source :	INERIS													
				Others										
Substance	EC-No. CAS-r	CAS-No	PNEC soil		PNEC s	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)
7365-45-9 / 230-907-9	230-907-9	7365-45-9												

#### 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 <u>Personal protective equipment:</u>

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

Skin protection:Gloves ;

Respiratory protection:Ensure adequate ventilation ;

Thermal hazards:

8.2.3 <u>Environmental exposure controls:</u>

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

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

		Concentration (mol/L)	Method	Temperature (°C)	Pressure (kPa)	Remark
рН	7					
Melting point (°C)						
Freezing point (°C)						
Initial boiling point/boiling range (°C)						
Flash point (°C)						
Evaporation rate (kg/m²/h)						
Flammability (type : ) (%)						



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						~ ~
r Upper explosive limit plosive (%)						
Lower explosive limit (%)						
kPa)						
/apour density (g/cm³)						
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> )						
) (g/L)						
nt (log Pow) t pH :						
perature (°C)						
Decomposition temperature (°C) Decomposition energy : kJ						
Viscosity, dynamic (poiseuille)						
Viscosity, cinematic (cm³/s)						
Explosive properties						
Oxidising properties						
	plosive (%) Lower explosive limit (%) (%) (%) 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> ) (g/L) it (log Pow) t pH : perature (°C) mperature (°C) mperature (°C) ergy : kJ Viscosity, dynamic (poiseuille) Viscosity, cinematic (cm <sup>3</sup> /s) Explosive properties	plosive (%) Lower explosive limit (%) (%) Lower explosive limit (%) (%) (%) (%) (%) Density (g/cm <sup>3</sup> ) Relative density (g/cm <sup>3</sup> ) Bulk density (g/cm <sup>3</sup> ) (%) (%) (%) (%) (%) (%) (%) (%	plosive         (%)           Lower explosive limit (%)	plosive         (%)         Image: Second sec	plosive	$\begin{array}{ c c c c c c } \hline \begin{tabular}{ c c c c } \hline \begin{tabular}{ c c c c c } \hline \begin{tabular}{ c c c c c c c } \hline \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$

### 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

<u>Substances</u>

• Acute toxicity

Animal data:

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#### 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:

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

In vitro eye test method: In vitro eye test result: Assessment / Classification:

#### • CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

• Germ cell mutagenicity:

Animal data:

# Assessment / Classification:

• Carcinogenicity

Practical experience / human evidence:

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

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Animal data:

Other information: Assessment / Classification:

o Reproductive toxicity

Practical experience / human evidence: Animal data:

Other information: Assessment / Classification:

Overall assessment on CMR properties:

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

Animal data:

Other information:

o 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 <u>Mixtures</u>

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

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

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mixture classification has to be used (calculation method) data of the ingredients are shown.

in this case the toxicological

# 12.1 Aquatic toxicity:

Acute (short-term) fish toxicity

Source :	Informatio	ormations 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.	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

Source :	Source : Informations relatives à la réglementation VME (France) : ED 984, 07.2012										
Substance	EC-No.	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.	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.	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 :	ource : Informations relatives à la réglementation VME (France) : ED 984, 07.2012										
Substance	EC-No.	EC-No. CAS-No EC50 (mg/L) Species Method Remark General Remark									
9002-93-1	9002-93-1										

Assessment / Classification:

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

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#### 12.2 Persistence and degradability

**Biodegradation:** 

Source :	Informations r	elatives à la ré	glementation VM	E (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)	рН	Method	Remark
9002-93-1		9002-93-1						

Assessment / Classification:

#### 12.3 Bioaccumulative potential

Bioconcentration factor (BCF):

Source :						
Substance	EC-No.	CAS-No	Species	Result	Method	Remark
9002-93-1		9002-93-1				

#### 12.4 Mobility in soil

Source :											
Substance	EC n°	CAS n°	Distribution	Transport	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. ;

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

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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 Provis	sions:
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, unload	ding 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:	
<u>Air transport (ICAO-TI / IATA-DGR)</u>	
Subsidiary risk for IATA:	Excepted quantity for IATA:
Passenger and Cargo Aircraft Limited Quantities	•
Passenger and Cargo Aircraft Limited Quantities	-
Passenger and Cargo Aircraft Packaging Instruction	
Passenger and Cargo Aircraft Maximal Net Quant	tity :
Cargo Aircraft only Packaging Instructions :	

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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:06/09/2023 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 statments
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: HTRF Lysis buffer (4X) - 130 mL Version: US, Page 1 of 13, Revision date: 07/09/2023

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

# 1.1 Product identifier:

Designation / Trade name: HTRF Lysis buffer (4X) - 130 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
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: HTRF Lysis buffer (4X) - 130 mL

Substances contained in this product:

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

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#### 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: HTRF Lysis buffer (4X) - 130 mL Version: US, Page 3 of 13, Revision date: 07/09/2023

# 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
4-(2- hydroxyethyl)piperazin-1- ylethanesulphonic acid	7365-45-9		230-907-9		< 10%		
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%		

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))

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# 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

<u>Protective measures:</u> 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. ; <u>Advice on general occupational hygiene</u>: Handle in accordance with good industrial hygiene and safety practice ;

## 7.2 Conditions for safe storage, including any incompatibilities

<u>Requirements for storage rooms and vessels</u>: Keep container tightly closed. ; <u>Hints on storage assembly:</u> Materials to avoid: <u>Further information on storage conditions:</u>

## 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))

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# 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)					
7365-45-9 / 230-907- 9	230-907-9	7365-45-9									

Source :	TRGS 903, November 2015, BAuA									
Substance	EC-No.	CAS-No	BGW (mg/m3)	BGW (ppm)						
7365-45-9 / 230-907- 9	230-907-9	7365-45-9								

## 8.1.2 DNEL/PNEC-values:

• DNEL worker

Source :	GESTIS – su	STIS – 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)	systemic effects					
7365-45-9 / 230-907-9	230-907-9	7365-45-9					23.5-23.5							

### • DNEL consumer

Source :	GESTIS – s	STIS – substance database											
Substance	EC-No.	CAS-No	Acute – dermal, local effects (mg/kg/day)	Long-term – dermal, local effects (mg/kg/day)	systemic effects	Acute – inhalation, local effects (mg/m3)	systemic effects	Long-term – inhalation, local effects (mg/m3)	systemic effects				
7365-45-9 / 230-907-9	230-907-9	7365-45-9											

PNEC

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

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																~	/
Source :	INERIS																
Substance	EC-No.			PNEC AQUATIC									PNEC Sediment				
			freshwater			m	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)	(ppm)
7365-45-9 / 230-907- 9	230-907-9	7365-45-9															

Source :	INERIS													
	EC-No.			Others										
Substance		CAS-No	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)
7365-45-9 / 230-907-9	230-907-9	7365-45-9												

#### 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 <u>Personal protective equipment:</u>

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

Skin protection:Gloves ;

Respiratory protection:Ensure adequate ventilation ;

Thermal hazards:

8.2.3 <u>Environmental exposure controls:</u>

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

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

		Concentration (mol/L)	Method	Temperature (°C)	Pressure (kPa)	Remark
рН	7					
Melting point (°C)						
Freezing point (°C)						
Initial boiling point/boiling range (°C)						
Flash point (°C)						
Evaporation rate (kg/m²/h)						
Flammability (type : ) (%)						



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Upper/lower flammability or explosive limits       Upper explosive limit (%)       Upper explosive limit (%)       Upper explosive limit (%) <th></th> <th></th> <th></th> <th></th> <th></th> <th>~</th>						~
$\begin{tabular}{ c c c c } \hline lower explosive limit (%) & lower explosive limit (%) &$	flammability or e					
$Vapour density (g/cm^3)$ $Densities$ $\frac{Density (g/cm^3)}{Relative density (g/cm^3)}$ $Bulk density (g/cm^3)$ $Critical density (g/cm^3)$ $C$	limits	Lower explosive limit (%)				
Densities     Density (g/cm <sup>3</sup> )     Image: Construction of the second se	Vapour pressure	(kPa)				
$\begin{array}{ c c c c c } \hline Pensitivs & Relative density (g/cm^3) & \hline \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	Vapour density (	g/cm³)				
Netative density (g/cm <sup>3</sup> )       Image: Critical density (g/cm <sup>3</sup> )       Image: Critical density (g/cm <sup>3</sup> )       Image: Critical density (g/cm <sup>3</sup> )         Solubility (Type : ) (g/L)       Image: Critical density (g/cm <sup>3</sup> )         Solubility (Type : ) (g/L)       Image: Critical density (g/cm <sup>3</sup> )         Partition coefficient (log Pow)       Image: Critical density (g/cm <sup>3</sup> )         Partition coefficient (log Pow)       Image: Critical density (g/cm <sup>3</sup> )       Imag		Density (g/cm <sup>3</sup> )				
Critical density (g/cm <sup>3</sup> )       Image: Critical density (g/cm <sup>3</sup> )       Image: Critical density (g/cm <sup>3</sup> )         Solubility (Type : ) (g/L)       Image: Critical density (g/cm <sup>3</sup> )       Image: Critical density (g/cm <sup>3</sup> )         Partition coefficient (log Pow)       Image: Critical density (g/cm <sup>3</sup> )       Image: Critical density (g/cm <sup>3</sup> )         Partition coefficient (log Pow)       Image: Critical density (g/cm <sup>3</sup> )       Image: Critical density (g/cm <sup>3</sup> )         Partition coefficient (log Pow)       Image: Critical density (g/cm <sup>3</sup> )       Image: Critical density (g/cm <sup>3</sup> )         Partition coefficient (log Pow)       Image: Critical density (g/cm <sup>3</sup> )       Image: Critical density (g/cm <sup>3</sup> )         Partition coefficient (log Pow)       Image: Critical density (g/cm <sup>3</sup> )       Image: Critical density (g/cm <sup>3</sup> )         Partition coefficient (log Pow)       Image: Critical density (g/cm <sup>3</sup> )       Image: Critical density (g/cm <sup>3</sup> )         Auto-ignition temperature (°C)       Image: Critical density (g/cm <sup>3</sup> )       Image: Critical density (g/cm <sup>3</sup> )         Decomposition temperature (°C)       Image: Critical density (g/cm <sup>3</sup> )       Image: Critical density (g/cm <sup>3</sup> )       Image: Critical density (g/cm <sup>3</sup> )         Viscosity, dynamic (poiseuille)       Image: Critical density (g/cm <sup>3</sup> )       Image: Critical density (g/cm <sup>3</sup> )       Image: Critical density (g/cm <sup>3</sup> )         Viscosity, cinematic (cm <sup>3</sup> /s)       Image: Critical density (g/cm <sup>3</sup> )       Image: Critical density (g/cm	Densities	Relative density (g/cm <sup>3</sup> )				
Solubility (Type : ) (g/L)       Image: Solubility (Type : ) (g/L)       Image: Solubility (Type : ) (g/L)         Partition coefficient (log Pow)       Image: Solubility (Type : ) (g/L)       Image: Solubility (Type : ) (g/L)         Partition coefficient (log Pow)       Image: Solubility (Type : ) (g/L)       Image: Solubility (Type : ) (g/L)         Auto-ignition temperature (°C)       Image: Solubility (Type : ) (g/L)       Image: Solubility (Type : ) (g/L)         Decomposition temperature (°C)       Image: Solubility (Type : ) (g/L)       Image: Solubility (Type : ) (g/L)         Viscosity, dynamic (poiseuille)       Image: Solubility (Type : ) (g/L)       Image: Solubility (Type : ) (g/L)         Viscosity, cinematic (cm³/s)       Image: Solubility (Type : ) (g/L)       Image: Solubility (Type : ) (g/L)		Bulk density (g/cm <sup>3</sup> )				
Partition coefficient (log Pow) n-octanol/water at pH :       Image: Composition temperature (°C)       Image: Composition temperature (°C)         Auto-ignition temperature (°C)       Image: Composition temperature (°C)       Image: Composition temperature (°C)         Decomposition temperature (°C)       Image: Composition temperature (°C)       Image: Composition temperature (°C)         Viscosity       Viscosity, dynamic (poiseuille)       Image: Composition temperature (°C)       Image: Composition temperature (°C)         Viscosity, cinematic (cm³/s)       Image: Composition temperature (°C)       Image: Composition temperature (°C)       Image: Composition temperature (°C)         Viscosity, dynamic (poiseuille)       Image: Composition temperature (°C)       Image: Composition temperature (°C)       Image: Composition temperature (°C)         Viscosity, dynamic (poiseuille)       Image: Composition temperature (°C)       Image: Composition temperature (°C)       Image: Composition temperature (°C)         Viscosity, dynamic (poiseuille)       Image: Composition temperature (°C)       Image: Composition temperature (°C)       Image: Composition temperature (°C)         Viscosity, dynamic (poiseuille)       Image: Composition temperature (°C)       Image: Composition temperature (°C)       Image: Composition temperature (°C)         Viscosity, cinematic (cm³/s)       Image: Composition temperature (°C)       Image: Composition temperature (°C)       Image: Composition temperature (°C)	Critical density (g/cm <sup>3</sup> )					
n-octanol/water at pH : Auto-ignition temperature (°C) Decomposition temperature (°C) Decomposition rergy : kJ Viscosity, dynamic (poiseuille) Viscosity, cinematic (cm³/s) Marchine de la	Solubility (Type :	) (g/L)				
Decomposition temperature (°C) Decomposition energy : kJ Viscosity, dynamic (poiseuille) Viscosity, cinematic (cm³/s)						
Decomposition energy : kJ     Image: Composition of the second seco	Auto-ignition ten	nperature (°C)				
Viscosity, cinematic (cm <sup>3</sup> /s)						
	Viscosity Viscosity, dynamic (poiseuille)					
Explosive properties		Viscosity, cinematic (cm <sup>3</sup> /s)	1			
	•	Explosive properties				
Oxidising 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

<u>Substances</u>

• Acute toxicity

Animal data:



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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:

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

In vitro eye test method: In vitro eye test result: Assessment / Classification:

#### • CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

• Germ cell mutagenicity:

Animal data:

Assessment / Classification:

• Carcinogenicity

Practical experience / human evidence:

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

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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)
  - o STOT SE 1 and 2

Animal data:

Other information:

o 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 <u>Mixtures</u>

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

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

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mixture classification has to be used (calculation method) data of the ingredients are shown.

in this case the toxicological

# 12.1 Aquatic toxicity:

Acute (short-term) fish toxicity

Source :	Informatio	ns relatives a	à la régleme	entation VM	IE (France) : E	D 984, 07.201	2			
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 r	elatives à la rég	glementation V	'ME (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

Source :	Source : Informations relatives à la réglementation VME (France) : ED 984, 07.2012											
Substance	EC-No.	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 r	elatives à la ré	glementation V	'ME (France) : El	0 984, 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 :	ource : Informations relatives à la réglementation VME (France) : ED 984, 07.2012											
Substance	EC-No.	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 :	nformations relatives à la réglementation VME (France) : ED 984, 07.2012										
Substance	EC-No.	EC-No. CAS-No EC50 (mg/L) Species Method Remark General Remark									
9002-93-1		9002-93-1									

Assessment / Classification:

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

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### 12.2 Persistence and degradability

**Biodegradation:** 

Source :	Informations r	nformations relatives à la réglementation VME (France) : ED 984, 07.2012									
Substance	EC-No.	EC-No. CAS-No Inoculum Biodegradation parameter Tate (%) 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)	рН	Method	Remark
9002-93-1		9002-93-1						

Assessment / Classification:

## 12.3 Bioaccumulative potential

Bioconcentration factor (BCF):

Source :						
Substance	EC-No.	CAS-No	Species	Result	Method	Remark
9002-93-1		9002-93-1				

## 12.4 Mobility in soil

Source :											
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. ;

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

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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 Provision	ons:
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, unloadi	ng 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:	Number of blue on a distant
Provisions concerning carriage:	Number of blue cones/lights:
Remark:	
<u>Air transport (ICAO-TI / IATA-DGR)</u>	
Subsidiary risk for IATA:	Excepted quantity for IATA:
Passenger and Cargo Aircraft Limited Quantities Pa	
Passenger and Cargo Aircraft Limited Quantities N	-
Passenger and Cargo Aircraft Packaging Instruction	-
Passenger and Cargo Aircraft Maximal Net Quantil	
Cargo Aircraft only Packaging Instructions :	·y ·

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

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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:06/09/2023 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 statments
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: HTRF B-arrestin 2 total kit - 20K pts d2 antibody Version: US, Page 1 of 12, Revision date: 06/10/2023

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

# 1.1 Product identifier:

Designation / Trade name:HTRF B-arrestin 2 total kit - 20K pts d2 antibodyCAS 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: HTRF B-arrestin 2 total kit - 20K pts d2 antibody

Substances contained in this product:



Designation / Trade name: HTRF B-arrestin 2 total kit - 20K pts d2 antibody Version: US, Page 2 of 12, Revision date: 06/10/2023

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) >= 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: HTRF B-arrestin 2 total kit - 20K pts d2 antibody Version: US, Page 3 of 12, Revision date: 06/10/2023

# 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
4-(2- hydroxyethyl)piperazin- 1-ylethanesulphonic acid	7365-45-9		230-907-9		< 3%		

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: HTRF B-arrestin 2 total kit - 20K pts d2 antibody Version: US, Page 4 of 12, Revision date: 06/10/2023

# 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

<u>Protective measures:</u> 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. ; <u>Advice on general occupational hygiene</u>: Handle in accordance with good industrial hygiene and safety practice ;

## 7.2 Conditions for safe storage, including any incompatibilities

<u>Requirements for storage rooms and vessels</u>: Keep container tightly closed. ; <u>Hints on storage assembly:</u> Materials to avoid: <u>Further information on storage conditions:</u>

## 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)



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						v				
Source :	Occupational Safe	ccupational 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)				
7365-45-9 / 230-907- 9	230-907-9	7365-45-9								

Source :	TRGS 903, November 2015, BAuA							
Substance	EC-No.	CAS-No	BGW (mg/m3)	BGW (ppm)				
7365-45-9 / 230-907- 9	230-907-9	7365-45-9						

### 8.1.2 <u>DNEL/PNEC-values:</u>

• DNEL worker

Source :	GESTIS – su	bstance dat	abase						
Substance	EC-No.	CAS-No	Acute – dermal, local effects (mg/kg/day)	Long-term – dermal, local effects (mg/kg/day)	systemic effects	Acute – inhalation, local effects (mg/m3)	systemic effects	Long-term – inhalation, local effects (mg/m3)	systemic effects
7365-45-9 / 230-907-9	230-907-9	7365-45-9					23.5-23.5		

# • DNEL consumer

Source :	GESTIS – si	ubstance da	tabase						
Substance	EC-No.	CAS-No	Acute – dermal, local effects (mg/kg/day)	Long-term – dermal, local effects (mg/kg/day)	systemic effects	Acute – inhalation, local effects (mg/m3)	systemic effects	Long-term – inhalation, local effects (mg/m3)	systemic effects
7365-45-9 / 230-907-9	230-907-9	7365-45-9							

#### • PNEC

Source :	INERIS																
Substance				PNEC AQUATIC PNE										NEC Se	Sediment		
	EC-No.		freshwater		marine water		intermittent release		freshwater		marine water		ær				
			(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)
7365-45-9 / 230-907- 9	230-907-9	7365-45-9															

Source :	INERIS



Designation / Trade name: HTRF B-arrestin 2 total kit - 20K pts d2 antibody Version: US, Page 6 of 12, Revision date: 06/10/2023

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)
7365-45-9 / 230-907-9	230-907-9	7365-45-9												

### 8.2 Exposure controls

8.2.1 <u>Appropriate engineering controls:</u>

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

8.2.2 <u>Personal protective equipment:</u>

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

<u>, ippearantee</u>	
Physical state	Liquid ;
Colour	Blue ;
Odour	
Odour threshold (ppm)	

		Value	Concentration	Method	Tomporature (°C)	Pressure (kPa)	Remark
		value	(mol/L)	wethod	Temperature (°C)	Pressure (KPa)	Remark
pH 7		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	Upper explosive limit (%)						
limits	Lower explosive limit (%)						
Vapour pressure (kPa)							
Vapour density (g/cm <sup>3</sup> )							
	Density (g/cm³)						
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)						



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					V
Decomposition temperature (°C) Decomposition energy : kJ					
Viscosity	Viscosity, dynamic (poiseuille)				
	Viscosity, cinematic (cm <sup>3</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:

Acute dermal toxicity:

Acute inhalative toxicity:

Practical experience / human evidence: Assessment / Classification: General Remark:

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

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## • 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 (carcinogenity, 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:

o STOT SE 3

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

Designation / Trade name: HTRF B-arrestin 2 total kit - 20K pts d2 antibody Version: US, Page 9 of 12, Revision date: 06/10/2023

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 <u>Mixtures</u> 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:

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

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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 Provisio	ns:
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	ng and handling:
Special Provisions for carriage Operation:	
Hazard identification No:	Transport category (Tunnel restriction code):

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

Designation / Trade name: HTRF B-arrestin 2 total kit - 20K pts d2 antibody Version: US, Page 11 of 12, Revision date: 06/10/2023

<u>Sea transport (IMDG)</u>	
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:	

<u>Air transport (ICAO-TI / IATA-DGR)</u>

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: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):



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

Designation / Trade name: HTRF B-arrestin 2 total kit - 20K pts Eu Cryptate antibody Version: US, Page 1 of 12, Revision date: 06/10/2023

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

## 1.1 Product identifier:

Designation / Trade name:HTRF B-arrestin 2 total kit - 20K pts Eu Cryptate antibodyCAS No.:Index No:EC No:REACH 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: HTRF B-arrestin 2 total kit - 20K pts Eu Cryptate antibody

Substances contained in this product:



Designation / Trade name: HTRF B-arrestin 2 total kit - 20K pts Eu Cryptate antibody Version: US, Page 2 of 12, Revision date: 06/10/2023

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) >= 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: HTRF B-arrestin 2 total kit - 20K pts Eu Cryptate antibody Version: US, Page 3 of 12, Revision date: 06/10/2023

# 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
4-(2- hydroxyethyl)piperazin- 1-ylethanesulphonic acid	7365-45-9		230-907-9		< 3%		

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: HTRF B-arrestin 2 total kit - 20K pts Eu Cryptate antibody Version: US, Page 4 of 12, Revision date: 06/10/2023

## 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

<u>Protective measures:</u> 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. ; <u>Advice on general occupational hygiene</u>: Handle in accordance with good industrial hygiene and safety practice ;

## 7.2 Conditions for safe storage, including any incompatibilities

<u>Requirements for storage rooms and vessels</u>: Keep container tightly closed. ; <u>Hints on storage assembly:</u> Materials to avoid: <u>Further information on storage conditions:</u>

## 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)



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Source :	Occupational Safe	upational 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)							
7365-45-9 / 230-907- 9	230-907-9	7365-45-9											

Source :	TRGS 903, Novemb	RGS 903, November 2015, BAuA										
Substance	EC-No.	CAS-No	BGW (mg/m3)	BGW (ppm)								
7365-45-9 / 230-907- 9	230-907-9	7365-45-9										

### 8.1.2 <u>DNEL/PNEC-values:</u>

• DNEL worker

Source :	GESTIS – su	STIS – 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)	systemic effects					
7365-45-9 / 230-907-9	230-907-9	7365-45-9					23.5-23.5							

## • DNEL consumer

Source :	GESTIS – si	STIS – substance database												
Substance	EC-No.	CAS-No	Acute – dermal, local effects (mg/kg/day)	Long-term – dermal, local effects (mg/kg/day)	systemic effects	Acute – inhalation, local effects (mg/m3)	systemic effects	Long-term – inhalation, local effects (mg/m3)	systemic effects					
7365-45-9 / 230-907-9	230-907-9	7365-45-9												

#### • PNEC

Source :	INERIS																
Substance				PNEC AQUATIC									PNEC Sediment				
	EC No		freshwater			m	marine water			intermittent release			freshwater			marine water	
	EC-No.	CAS-No	(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)
7365-45-9 / 230-907- 9	230-907-9	7365-45-9															

Source :	INERIS



Designation / Trade name: HTRF B-arrestin 2 total kit - 20K pts Eu Cryptate antibody Version: US, Page 6 of 12, Revision date: 06/10/2023

1	EC-No. CAS-		Others												
Substance		CAS-No	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)	
7365-45-9 / 230-907-9	230-907-9	7365-45-9													

#### 8.2 Exposure controls

8.2.1 <u>Appropriate engineering controls:</u>

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

8.2.2 <u>Personal protective equipment:</u>

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

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

		-		-			
		Value	Concentration (mol/L)	Method	Temperature (°C)	Pressure (kPa)	Remark
рН		7					
Melting point (°C)							
Freezing point (°C)							
Initial boiling point/boiling	range (°C)						
Flash point (°C)							
Evaporation rate (kg/m²/h)							
Flammability (type : ) (%)							
Upper/lower flammability or explosive limits	Upper explosive limit (%)						
limits	Lower explosive limit (%)						
Vapour pressure (kPa)							
Vapour density (g/cm³)							
	Density (g/cm³)						
Densities	Relative density (g/cm <sup>3</sup> )						
	Bulk density (g/cm³)						
	Critical density (g/cm <sup>3</sup> )						
Solubility (Type:) (g/L)							
Partition coefficient (log Pow) n-octanol/water at pH :							
Auto-ignition temperature	(°C)						



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				V
Decomposition to Decomposition e				
Viscosity	Viscosity, dynamic (poiseuille)			
	Viscosity, cinematic (cm <sup>3</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:

Acute dermal toxicity:

Acute inhalative toxicity:

Practical experience / human evidence: Assessment / Classification: General Remark:

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

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## • 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 (carcinogenity, 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:

o STOT SE 3

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

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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 <u>Mixtures</u> 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:

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

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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 Provision	ons:
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	ng and handling:
Special Provisions for carriage Operation:	
Hazard identification No:	Transport category (Tunnel restriction code):

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

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Sea transport (IMDG) Marine Pollutant: Packing provisions for IMDG: Packing instructions for IMDG: IBC Provisions: UN tank instructions: EmS : Properties and observations:	Subsidiary risk(s) for IMDG: Limited quantities for IMDG: IBC Instructions: IMO tank instructions: Tanks and bulk Provisions: Stowage and segregation for IMDG:
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:	
<u>Air transport (ICAO-TI / IATA-DGR)</u> Subsidiary risk for IATA: Passenger and Cargo Aircraft Limited Quantities F	Excepted quantity for IATA: Packing Instructions:

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 Packaging Instructions :Cargo Aircraft only Maximal Net Quantity :ERG code:

# 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: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):



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

## 1.1 Product identifier:

Designation / Trade name: HTRF P-T prot. - Detect. Buf. 50 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: HTRF P-T prot. - Detect. Buf. 50 mL

Substances contained in this product:



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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) >= 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:

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## 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
potassium fluoride	7789-23-3	009-005-00-2	232-151-5	Acute toxicity - Acute Tox. 3 - H301 - Oral Acute toxicity - Acute Tox. 3 - H311 - Dermal Acute toxicity - Acute Tox. 3 - H331 - Inhalation			
4-(2- hydroxyethyl)piperazin- 1-ylethanesulphonic acid	7365-45-9		230-907-9				

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.;

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

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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. ; <u>Advice on general occupational hygiene</u> : Handle in accordance with good industrial hygiene and safety practice ;

## 7.2 Conditions for safe storage, including any incompatibilities

<u>Requirements for storage rooms and vessels</u>: Keep container tightly closed. ; <u>Hints on storage assembly:</u> 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)



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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)			
7365-45-9 / 230-907- 9		7365-45-9							
7789-23-3 / 232-151- 5	232-151-5	7789-23-3							

Source :	TRGS 903, November 2015, BAuA							
Substance	EC-No.	CAS-No	BGW (mg/m3)	BGW (ppm)				
7365-45-9 / 230-907- 9	230-907-9	7365-45-9						
7789-23-3 / 232-151- 5	232-151-5	7789-23-3						

## 8.1.2 DNEL/PNEC-values:

• DNEL worker

Source :	GESTIS – su	GESTIS – substance database									
Substance	EC-No.	CAS-No	Acute – dermal, local effects (mg/kg/day)	Long-term – dermal, local effects (mg/kg/day)	systemic etterts	Acute – inhalation, local effects (mg/m3)	systemic etterts	Long-term – inhalation, local effects (mg/m3)	systemic etterts		
7365-45-9 / 230-907-9	230-907-9	7365-45-9					23.5-23.5				
7789-23-3 / 232-151-5	232-151-5	7789-23-3				3-3	3-3				

## • DNEL consumer

Source :	GESTIS – s	SESTIS – 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)	systemic effects	Long-term – inhalation, local effects (mg/m3)	systemic effects		
7365-45-9 / 230-907-9	230-907-9	7365-45-9									
7789-23-3 / 232-151-5	232-151-5	7789-23-3									

## • PNEC

Source :	INERIS			
Substance	EC-No.	CAS-No	PNEC AQUATIC	PNEC Sediment



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			-													$\sim$	
				freshwater			marine water intermittent releas			lease	e 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)	(ppm)
7365-45-9 / 230-907- 9	230-907-9	7365-45-9															
7789-23-3 / 232-151- 5	232-151-5	7789-23-3															

Source :	INERIS													
			Others											
Substance	EC-No.	CAS-No	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)
7365-45-9 / 230-907-9	230-907-9	7365-45-9												
7789-23-3 / 232-151-5	232-151-5	7789-23-3												

## 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 <u>Personal protective equipment:</u>

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

<u>Measures related to consumer uses of the substance (as such or in mixtures):</u> <u>Measures related to the service life of the substance in articles:</u>

## SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance

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

		Concentration (mol/L)	Method	Temperature (°C)	Pressure (kPa)	Remark
рН	7					
Melting point (°C)						
Freezing point (°C)						
Initial boiling point/boiling range (°C)						

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

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						v
1²/h)						
%)						
Upper explosive limit (%)						
Lower explosive limit (%)						
)						
Density (g/cm³)						
Relative density (g/cm <sup>3</sup> )						
Bulk density (g/cm <sup>3</sup> )						
Critical density (g/cm <sup>3</sup> )						
L)						
ture (°C)						
Decomposition temperature (°C) Decomposition energy : kJ						
Viscosity, dynamic (poiseuille)						
Viscosity, cinematic (cm <sup>3</sup> /s)						
Explosive properties						
Oxidising properties						
	ve (%) Lower explosive limit (%) 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> ) Critical density (g/cm <sup>3</sup> ) L) bg Pow) : ture (°C) rature (°C) : kJ Viscosity, dynamic (poiseuille) Viscosity, cinematic (cm <sup>3</sup> /s) Explosive properties	%) Upper explosive limit (%) Lower explosive limit (%) Lower explosive limit (%)  Density (g/cm <sup>3</sup> )  Pensity (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> ) L) Density (g/cm <sup>3</sup> ) Critical density (g/cm <sup>3</sup> ) L) Undersity Critical density (g/cm <sup>3</sup> ) Critica	%) Upper explosive limit (%) Lower explosive limit (%) Lower explosive limit (%)  Density (g/cm <sup>3</sup> )  Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) Pensity (g/cm <sup>3</sup> ) P	%) Upper explosive limit (%) Upper explosive limit (%) Lower explosive limit (%) Comparison of the second of the	%) Upper explosive limit (%) Upper explosive limit (%) Lower explosive limit (%) Constraints	%)     Upper explosive limit (%)            Lower explosive limit (%)            Lower explosive limit (%)            Density (g/cm³)            Pensity (g/cm³)            Bulk density (g/cm³)            Critical density (g/cm³)            In the set of th

## 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** 

Designation / Trade name: HTRF P-T prot. - Detect. Buf. 50 mL Version: US, Page 8 of 12, Revision date: 06/10/2023

#### • Acute toxicity

Animal data: Acute oral toxicity:

Substance name	LD50 (mg/kg)	Species	Method	Symptoms / delayed effects	Remark
7789-23-3 / 232-151-5	245-245	Rat			

Acute dermal toxicity:

Substance name	LD50 (mg/kg)	Species	Method	Remark
7789-23-3 / 232-151-5				

Acute inhalative toxicity:

Substance name	C(E)L50 (mg/L)	Exposure time	Species	Method	Remark
7789-23-3 / 232-151-5					

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 (carcinogenity, mutagenicity and toxicity for reproduction)
  - Germ cell mutagenicity:

Animal data:

Assessment / Classification:

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

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## • 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)

o STOT SE 1 and 2

Animal data:

Other information:

o 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 <u>Mixtures</u> No toxicological information is available for the mixture itself

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

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# 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):

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:

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

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#### 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:	Special Provisions for ADR/RID: Excepted Quantities for ADR/RID:
Mixed packing provisions:	Portable tanks and bulk containers Instructions:
Portable tanks and bulk containers Special Provision	ions:
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, unload	ling and handling:
Special Provisions for carriage Operation:	
Hazard identification No:	Transport category (Tunnel restriction code):
<u>Sea transport (IMDG)</u>	
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 DCD)	
<u>Air transport (ICAO-TI / IATA-DGR)</u>	Excepted quantity for LATA:
Subsidiary risk for IATA: Passenger and Cargo Aircraft Limited Quantities F	Excepted quantity for IATA:
Passenger and Cargo Aircraft Limited Quantities P	-
Passenger and Cargo Aircraft Packaging Instruction	-
Passenger and Cargo Aircraft Maximal Net Quant	
Cargo Aircraft only Packaging Instructions :	
Cargo Aircraft only Maximal Net Quantity :	
ERG code:	Special Provisions for IATA:

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## 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:09/09/2023 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):

