

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

Trade name: HTRF (h) KRAS Total Kit - 500 pts / 64KRASTPEG

Version: KIT, Page 1 of 1, Revision date: 23/10/2024

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 (h) KRAS Total Kit - 500 pts d2 antibody		1	7	Blue	Liquid
HTRF (h) KRAS Total Kit - 500 pts Eu Cryptate antibody		1	7	Colorless	Liquid
HTRF (h) KRAS Total Kit - Ctrl Lysate	64KRASTTDA	1	7	Colorless	Liquid
HTRF P-T prot Lysis Buf.6 (4X) 2 mL		4	7	Colorless	Liquid
HTRF P-T prot Block. reag.(100X) 0.3 mL		1	-	Colorless	Liquid
HTRF P-T prot Detect. Buf. 2 mL		2	7	Colorless	Liquid





Designation / Trade name: HTRF (h) KRAS Total Kit - Ctrl Lysate 64KRASTTDA

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

1.1 Product identifier:

Designation / Trade name: HTRF (h) KRAS Total Kit - Ctrl Lysate 64KRASTTDA

CAS 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 (h) KRAS Total Kit - Ctrl Lysate 64KRASTTDA

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:



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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				
lithium dodecyl sulphate	2044-56-6		218-058-2				
disodium dihydrogenpyrophosphate	7758-16-9		231-835-0	Serious eye damage/eye irritation - Eye Irrit. 2 - H319			
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			
CBB Substance	NOCAS4			Acute toxicity - Acute Tox. 4 - H302 - Oral Acute toxicity - Acute Tox. 4 - H332 - Inhalation Hazardous to the aquatic environment - Aquatic Chronic 3 - H412 Serious eye damage/eye irritation - Eye Dam. 1 - H318 Skin corrosion/irritation - Skin Irrit. 2 - H315 Specific target organ toxicity - single exposure - STOT SE 3 - H335			
trisodium tetraoxovanadate	13721-39-6		237-287-9	Acute toxicity - Acute Tox. 4 - H302 - Oral Acute toxicity - Acute Tox. 4 - H312 - Dermal Acute toxicity - Acute Tox. 4 - H332 - Inhalation Serious eye damage/eye irritation - Eye Irrit. 2 - H319 Skin corrosion/irritation - Skin Irrit. 2 - H315			
β-Glycerophosphate	13408-09-8						1

Additional information:

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



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SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General information: Do not leave affected person unattended.;

Following inhalation: In case of respiratory tract irritation, consult a physician.; **Following skin contact**: After contact with skin, wash immediately with water;

Following eye contact: After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time,

then consult an ophthalmologist immediately.; **Following ingestion**: Do NOT induce vomiting.;

Self-protection of the first aider:

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: No known symptoms to date.;

Effects:

4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor:

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

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

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: /

5.3 Advice for fire-fighters

Wear Protective clothing.; Additional information:

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Emergency procedures: Provide adequate ventilation.;

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:



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SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures:

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

Fire preventions:

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

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

7.2 Conditions for safe storage, including any incompatibilities

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

Hints on storage assembly:

Materials to avoid:

Further information on storage conditions:

7.3 Specific end uses:

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Preliminary remark:

8.1.1 Occupational exposure limits:

OSHA (USA)

Source :	Occupational Safe	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 – substance database



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					_				V
Substance	EC-No.	CAS-No	Acute – dermal, local effects (mg/kg/day)	Long-term – dermal, local effects (mg/kg/day)	lsystemic 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 – sı	ubstance da	tabase						
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							

PNEC

Source :	INERIS																
						PN	C AQUA	TIC					Р	NEC Se	edimen	t	
Substance	whetenes FC No. CAC No.			freshwate	r	m	arine wat	er	interr	intermittent release		fı	reshwate	er	ma	marine water	
Substance EC-No.	EC-NO.	o. 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													
Substance	EC-No.							Oth	ers					
		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												

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:



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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

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

		Value	Concentration (mol/L)	Method	Temperature (°C)	Pressure (kPa)	Remark
pН		7	(, =)				
Melting point (°C)							
reezing point (°C)							
Initial boiling point/bo	nitial boiling point/boiling range (°C)						
Flash point (°C)							
Evaporation rate (kg/r	n²/h)						
Flammability (type :)	%)						
Upper/lower flammability or explos	Upper explosive limit ive (%)						
limits	Lower explosive limit (%)						
Vapour pressure (kPa)							
Vapour density (g/cm ³)						
	Density (g/cm³)						
Densities	Relative density (g/cm³)						
	Bulk density (g/cm³)						
	Critical density (g/cm³)						
Solubility (Type:) (g/	L)						
Partition coefficient (le n-octanol/water at pH							
Auto-ignition tempera	ture (°C)						
Decomposition temperature (°C) Decomposition energy : kJ							
Viscosity	Viscosity, dynamic (poiseuille)						
	Viscosity, cinematic (cm³/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



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10.3 Possibility of hazardous reactions

10.4 Conditions to avoid:

10.5 Incompatible materials:

10.6 Hazardous decomposition products:

Does not decompose when used for intended uses.;

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution

11.1 Information on toxicological effects

Substances

Acute toxicity

Animal data:

Acute oral toxicity:

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

Acute dermal toxicity:

Acute inhalative toxicity:

Practical experience / human evidence:

Assessment / Classification:

General Remark:

• Skin corrosion/irritation

Animal data:

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

In-vitro skin test method:

In-vitro skin test result:

Assessment / Classification:



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Eye damage/irritation

Animal data:

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

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

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

Animal data:

Assessment / Classification:

Carcinogenicity

Practical experience / human evidence:

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)



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Practical experience / human evidence:

Animal data:

Assessment / Classification:

Other information

Aspiration hazard

Practical experience / human evidence:

Experimental data: viscosity data: see SECTION 9.

Assessment / Classification:

Remark:

11.1.1 Mixtures

No toxicological information is available for the mixture itself

SECTION 12: ECOLOGICAL INFORMATION

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

12.1 Aquatic toxicity:

Acute (short-term) fish toxicity

Source :	The state of the s											
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 :	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. 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 :	urce: 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										



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

Assessment / Classification:

12.2 Persistence and degradability

Biodegradation:

Source :	Informations 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



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						V
9002-93-1	9002-					
9002-93-1	93-1					

12.5 Results of PBT and vPvB assessment

12.6 Other adverse effects:

Additional ecotoxicological information:

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste treatment options:

Dispose of waste according to applicable legislation.;

Other disposal recommendations:

Additional information:

SECTION 14: TRANSPORT INFORMATION

ADR/RID/AND/IMDG/IATA

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

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

Land transport (ADR/RID)

Classification code ADR: Special Provisions for ADR/RID: Limited quantities for ADR/RID: Excepted Quantities for ADR/RID:

Packing Instructions for ADR/RID: Special packing provisions for ADR/RID:

Mixed packing provisions: Portable tanks and bulk containers Instructions:

Portable tanks and bulk containers Special Provisions:

ADR Tank Code: ADR Tank special provisions:

Vehicle for tank carriage: Special provisions for carriage Packages:

Special provisions for carriage Bulk:

Special provisions for carriage for loading, unloading and handling:

Special Provisions for carriage Operation:

Hazard identification No: Transport category (Tunnel restriction code):

Sea transport (IMDG)

Marine Pollutant: Subsidiary risk(s) for IMDG: Packing provisions for IMDG: Limited quantities for IMDG:

Packing instructions for IMDG: IBC Instructions:
IBC Provisions: IMO tank instructions:
UN tank instructions: Tanks and bulk Provisions:

EmS: Stowage and segregation for IMDG:



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Properties and observations:

Inland waterway transport (ADN)

Classification Code ADN: Special Provisions ADN:
Limited quantities ADN: Excepted quantities ADN:
Carriage permitted: Equipment required:

Provisions concerning loading and unloading:

Provisions concerning carriage: Number of blue cones/lights:

Remark:

Air transport (ICAO-TI / IATA-DGR)

Subsidiary risk for IATA: Excepted quantity for IATA:

Passenger and Cargo Aircraft Limited Quantities Packing Instructions:

Passenger and Cargo Aircraft Limited Quantities Maximal Net Quantity:

Passenger and Cargo Aircraft Packaging Instructions: Passenger and Cargo Aircraft Maximal Net Quantity:

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

ERG code: Special Provisions for IATA:

SECTION 15: REGULATORY INFORMATION

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

15.2 Chemical Safety Assessment:

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

SECTION 16: OTHER INFORMATION

16.1 Indication of changes

Date of the previous version:03/10/2024 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





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Designation / Trade name: HTRF (h) KRAS Total Kit - 500 pts d2 antibody

Version: US, Page 1 of 12, Revision date: 16/09/2024

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

1.1 Product identifier:

Designation / Trade name: HTRF (h) KRAS Total Kit - 500 pts d2 antibody CAS 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 (h) KRAS Total Kit - 500 pts d2 antibody

Substances contained in this product:



Designation / Trade name: HTRF (h) KRAS Total Kit - 500 pts d2 antibody

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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:



Designation / Trade name: HTRF (h) KRAS Total Kit - 500 pts d2 antibody

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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%		

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

 $We ar \ Protective \ clothing. \ ;$

Additional information:



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Version: US, Page 4 of 12, Revision date: 16/09/2024

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Emergency procedures: Provide adequate ventilation.;

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

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

6.4 Reference to other sections

Additional information:

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures:

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

Fire preventions:

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

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

7.2 Conditions for safe storage, including any incompatibilities

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

Hints on storage assembly:

Materials to avoid:

Further information on storage conditions:

7.3 Specific end uses:

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Preliminary remark:

8.1.1 Occupational exposure limits:

OSHA (USA)



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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	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	TIS – 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)	customic offacts	Long-term – inhalation, local effects (mg/m3)	cyctomic attacts		
7365-45-9 / 230-907-9	230-907-9	7365-45-9					23.5-23.5				

DNEL consumer

Source :	GESTIS – sı	STIS – substance database										
Substance	EC-No.	CAS-No	Acute – dermal, local effects (mg/kg/day)	dermal, local dermal,		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																
				PNEC AQUATIC									PNEC Sediment				
Substance	EC No	EC-No. CAS-No	freshwater			m	marine water		intermittent release		freshwater			marine water		:er	
Substance	EC-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



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	EC-No.	CAS-No		Others										
Substance			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

<u>Appearance</u>

7 10 0 C G 1 G 1 1 C C	
Physical state	Liquid;
Colour	Blue;
Odour	
Odour threshold (ppm)	

		Value	Concentration	Method	Temperature (°C)	Pressure (kPa)	Remark
		value	(mol/L)	Wicthou	remperature (c)	ressure (ki u)	Kemark
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	Upper explosive limit (%)						
limits	Lower explosive limit (%)						
Vapour pressure (kPa)							
Vapour density (g/cm³)							
	Density (g/cm³)						
Densities	Relative density (g/cm³)						
	Bulk density (g/cm³)						
	Critical density (g/cm³)						
Solubility (Type:) (g/L)							
Partition coefficient (log Pow) n-octanol/water at pH :							
Auto-ignition temperature	(°C)						



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Decomposition to Decomposition 6									
Viscosity	Viscosity Viscosity, dynamic (poiseuille)								
	Viscosity, cinematic (cm ³ /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:



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•	Skin	corrosion	/irritation
-	JIVIII	COLLOSION	III I I LUCLIOII

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)
 - o Germ cell mutagenicity:

Animal data:

Assessment / Classification:

Carcinogenicity

Practical experience / human evidence:

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



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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 Mixtures

No toxicological information is available for the mixture itself

SECTION 12: ECOLOGICAL INFORMATION

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

12.1 Aquatic toxicity:

Acute (short-term) fish toxicity

Chronic (long-term) fish toxicity

Acute (short-term) toxicity to crustacea

Chronic (long-term) toxicity to crustacea

Acute (short-term) toxicity to algae and cyanobacteria

<u>Toxicity to microorganisms and other aquatic plants / organisms</u>

Assessment / Classification:

12.2 Persistence and degradability

Biodegradation:

Abiotic Degradation:



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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:

Limited quantities for ADR/RID:

Excepted Quantities for ADR/RID:

Packing Instructions for ADR/RID: Special packing provisions for ADR/RID:

Mixed packing provisions: Portable tanks and bulk containers Instructions:

Portable tanks and bulk containers Special Provisions:

ADR Tank Code: ADR Tank special provisions:

Vehicle for tank carriage: Special provisions for carriage Packages:

Special provisions for carriage Bulk:

Special provisions for carriage for loading, unloading and handling:

Special Provisions for carriage Operation:

Hazard identification No: Transport category (Tunnel restriction code):



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Sea transport (IMDG)

Marine Pollutant: Subsidiary risk(s) for IMDG: Packing provisions for IMDG: Limited quantities for IMDG:

Packing instructions for IMDG: IBC Instructions:
IBC Provisions: IMO tank instructions:
UN tank instructions: Tanks and bulk Provisions:

EmS: Stowage and segregation for IMDG:

Properties and observations:

Inland waterway transport (ADN)

Classification Code ADN: Special Provisions ADN:
Limited quantities ADN: Excepted quantities ADN:
Carriage permitted: Equipment required:

Provisions concerning loading and unloading:

Provisions concerning carriage: Number of blue cones/lights:

Remark:

Air transport (ICAO-TI / IATA-DGR)

Subsidiary risk for IATA: Excepted quantity for IATA:

Passenger and Cargo Aircraft Limited Quantities Packing Instructions: Passenger and Cargo Aircraft Limited Quantities Maximal Net Quantity:

Passenger and Cargo Aircraft Packaging Instructions : Passenger and Cargo Aircraft Maximal Net Quantity :

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

ERG code: Special Provisions for IATA:

SECTION 15: REGULATORY INFORMATION

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

15.2 Chemical Safety Assessment:

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

SECTION 16: OTHER INFORMATION

16.1 Indication of changes

Date of the previous version:12/09/2024

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 (h) KRAS Total Kit - 500 pts Eu Cryptate antibody

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 (h) KRAS Total Kit - 500 pts Eu Cryptate antibody

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
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. ; $\textbf{Following ingestion} : \ \, \textbf{Do NOT induce vomiting.} \; ; \\$

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:



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SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Emergency procedures: Provide adequate ventilation.;

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

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

6.4 Reference to other sections

Additional information:

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures:

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

Fire preventions:

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

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

7.2 Conditions for safe storage, including any incompatibilities

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

Hints on storage assembly:

Materials to avoid:

Further information on storage conditions:

7.3 Specific end uses:

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Preliminary remark:

8.1.1 Occupational exposure limits:

OSHA (USA)



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Source :	Occupational Safe	ty and Health Admin	sible 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	er 2015, BAuA		
Substance			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)	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 – sı	ESTIS – 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																	
			PNEC AQUATIC										Р	NEC S	Sediment			
Cubatanaa	EC-No.	CAS No	freshwater			marine water		intermittent release		freshwater		marine water		er				
Substance	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
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		CAS-No	Others												
Substance	EC-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 <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

<u>Appearance</u>

7 10 0 Caramee	
Physical state	Liquid;
Colour	Colorless;
Odour	
Odour threshold (ppm)	

		Value	Concentration (mol/L)	Method	Temperature (°C)	Pressure (kPa)	Remark
pH		7	(moi/ L)				
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	Upper explosive limit (%)						
limits	Lower explosive limit (%)						
Vapour pressure (kPa)							
Vapour density (g/cm³)							
	Density (g/cm³)						
Densities	Relative density (g/cm³)						
	Bulk density (g/cm³)						
	Critical density (g/cm³)						
Solubility (Type:) (g/L)							
Partition coefficient (log Pow) n-octanol/water at pH :							
Auto-ignition temperature	(°C)						



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



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• Skin corrosion/irritation

A ! I	
Animal	luata.

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)
 - o Germ cell mutagenicity:

Animal data:

Assessment / Classification:

Carcinogenicity

Practical experience / human evidence:

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



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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 Mixtures

No toxicological information is available for the mixture itself

SECTION 12: ECOLOGICAL INFORMATION

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

12.1 Aquatic toxicity:

Acute (short-term) fish toxicity

Chronic (long-term) fish toxicity

Acute (short-term) toxicity to crustacea

Chronic (long-term) toxicity to crustacea

Acute (short-term) toxicity to algae and cyanobacteria

<u>Toxicity to microorganisms and other aquatic plants / organisms</u>

Assessment / Classification:

12.2 Persistence and degradability

Biodegradation:

Abiotic Degradation:



Designation / Trade name: HTRF (h) KRAS Total Kit - 500 pts Eu Cryptate antibody

Version: US, Page 10 of 12, Revision date: 23/09/2024

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:

Limited quantities for ADR/RID:

Excepted Quantities for ADR/RID:

Packing Instructions for ADR/RID: Special packing provisions for ADR/RID:

Mixed packing provisions: Portable tanks and bulk containers Instructions:

Portable tanks and bulk containers Special Provisions:

ADR Tank Code: ADR Tank special provisions:

Vehicle for tank carriage: Special provisions for carriage Packages:

Special provisions for carriage Bulk:

Special provisions for carriage for loading, unloading and handling:

Special Provisions for carriage Operation:

Hazard identification No: Transport category (Tunnel restriction code):



Designation / Trade name: HTRF (h) KRAS Total Kit - 500 pts Eu Cryptate antibody

Version: US, Page 11 of 12, Revision date: 23/09/2024

Sea transport (IMDG)

Marine Pollutant: Subsidiary risk(s) for IMDG: Packing provisions for IMDG: Limited quantities for IMDG:

Packing instructions for IMDG: IBC Instructions:
IBC Provisions: IMO tank instructions:
UN tank instructions: Tanks and bulk Provisions:

EmS: Stowage and segregation for IMDG:

Properties and observations:

Inland waterway transport (ADN)

Classification Code ADN: Special Provisions ADN:
Limited quantities ADN: Excepted quantities ADN:
Carriage permitted: Equipment required:

Provisions concerning loading and unloading:

Provisions concerning carriage: Number of blue cones/lights:

Remark:

Air transport (ICAO-TI / IATA-DGR)

Subsidiary risk for IATA: Excepted quantity for IATA:

Passenger and Cargo Aircraft Limited Quantities Packing Instructions: Passenger and Cargo Aircraft Limited Quantities Maximal Net Quantity:

Passenger and Cargo Aircraft Packaging Instructions : Passenger and Cargo Aircraft Maximal Net Quantity :

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

ERG code: Special Provisions for IATA:

SECTION 15: REGULATORY INFORMATION

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

15.2 Chemical Safety Assessment:

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

SECTION 16: OTHER INFORMATION

16.1 Indication of changes

Date of the previous version:16/09/2024

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):





Designation / Trade name: HTRF (h) KRAS Total Kit - 500 pts Eu Cryptate antibody

Version: US, Page 12 of 12, Revision date: 23/09/2024





Designation / Trade name: HTRF P-T prot. - Lysis Buf.6 (4X) 2 mL

Version: US, Page 1 of 13, Revision date: 23/10/2024

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

1.1 Product identifier:

Designation / Trade name: HTRF P-T prot. - Lysis Buf.6 (4X) 2 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 P-T prot. - Lysis Buf.6 (4X) 2 mL

Substances contained in this product:



Designation / Trade name: HTRF P-T prot. - Lysis Buf.6 (4X) 2 mL

Version: US, Page 2 of 13, Revision date: 23/10/2024

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:



Designation / Trade name: HTRF P-T prot. - Lysis Buf.6 (4X) 2 mL

Version: US, Page 3 of 13, Revision date: 23/10/2024

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;



Designation / Trade name: HTRF P-T prot. - Lysis Buf.6 (4X) 2 mL

Version: US, Page 4 of 13, Revision date: 23/10/2024

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: /

5.3 Advice for fire-fighters

Wear Protective clothing.; Additional information:

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Emergency procedures: Provide adequate ventilation.;

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

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

6.4 Reference to other sections

Additional information:

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures:

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

Fire preventions:

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

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

7.2 Conditions for safe storage, including any incompatibilities

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

Hints on storage assembly:

Materials to avoid:

Further information on storage conditions:

7.3 Specific end uses:

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



Designation / Trade name: HTRF P-T prot. - Lysis Buf.6 (4X) 2 mL

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Preliminary remark:

8.1.1 <u>Occupational exposure limits:</u>

OSHA (USA)

Source :	Occupational Safe	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	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	ESTIS – 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					23.5-23.5						

DNEL consumer

Source :	GESTIS – sı	ESTIS – substance database												
Substance	EC-No.	CAS-No	Acute – dermal, local effects (mg/kg/day)	dermal, local	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												



Designation / Trade name: HTRF P-T prot. - Lysis Buf.6 (4X) 2 mL

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Source :	INERIS																
	EC-No.			PNEC AQUATIC								PNEC Sediment					
Substance		CAS-No	freshwater			ma	marine water		intermittent release		freshwater		er	marine water		er	
			(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	VERIS												
	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

<u>Appearance</u>

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 :) (%)						



Designation / Trade name: HTRF P-T prot. - Lysis Buf.6 (4X) 2 mL

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						<u> </u>
Upper/low	er Upper explosive limit					
flammability or e	xplosive (%)					
limits	Lower explosive limit (%)					
Vapour pressure						
Vapour density (g						
rapour acrisity (8	·					
	Density (g/cm³)					
Densities	Relative density (g/cm³)					
	Bulk density (g/cm³)					
	Critical density (g/cm³)					
Solubility (Type :) (g/L)					
Partition coefficie	nt (log Pow)					
n-octanol/water	at pH:					
Auto-ignition tem	perature (°C)					
Decomposition to	mperature (°C)					
Decomposition energy: kJ						
Viscosity Viscosity, dynamic (poiseuille)						
ļ	Viscosity, cinematic (cm³/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:



Designation / Trade name: HTRF P-T prot. - Lysis Buf.6 (4X) 2 mL

Version: US, Page 8 of 13, Revision date: 23/10/2024

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	Result/evaluation	Score	Remark
9002-93-1						

In-vitro skin test method:

In-vitro skin test result:

Assessment / Classification:

• Eye damage/irritation

Animal data:

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

In vitro eye test method:

In vitro eye test result:

Assessment / Classification:

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

Animal data:

Assessment / Classification:

Carcinogenicity

Practical experience / human evidence:



Designation / Trade name: HTRF P-T prot. - Lysis Buf.6 (4X) 2 mL

Version: US, Page 9 of 13, Revision date: 23/10/2024

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 Mixtures

No toxicological information is available for the mixture itself

SECTION 12: ECOLOGICAL INFORMATION

In case that test data regarding one endpoint/differentiation exist for the mixture itself, the classification is carried out according to the substance criteria (excluding biodegradation and bioaccumulation). If no test data exist, the criteria for



Designation / Trade name: HTRF P-T prot. - Lysis Buf.6 (4X) 2 mL

Version: US, Page 10 of 13, Revision date: 23/10/2024

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 VIV	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.	C-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 :	Information	s relatives à la	a réglementa	ition VME (Fran	ce) : ED 984, 0	7.2012					
Substance	EC-No.	C-No. CAS-No EC50 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	nformations 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	s relatives à l	a réglementat	tion VME (Fran	ce) : ED 984, 07	.2012					
Substance	EC-No.	C-No. CAS-No EC50 (mg/L) Test duration Species Result/ Evaluation Method Remark General Remark									
9002-93-1		9002-93-1									

Toxicity to microorganisms and other aquatic plants / organisms

Source :	Informations rela	atives à la réglem	entation VME (Fr	ance) : ED 984, 07.	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:



Designation / Trade name: HTRF P-T prot. - Lysis Buf.6 (4X) 2 mL

Version: US, Page 11 of 13, Revision date: 23/10/2024

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	tvne	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.;



Designation / Trade name: HTRF P-T prot. - Lysis Buf.6 (4X) 2 mL

Version: US, Page 12 of 13, Revision date: 23/10/2024

Other disposal recommendations:

Additional information:

SECTION 14: TRANSPORT INFORMATION

ADR/RID/AND/IMDG/IATA

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

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

Land transport (ADR/RID)

Classification code ADR: Special Provisions for ADR/RID: Limited quantities for ADR/RID: Excepted Quantities for ADR/RID:

Packing Instructions for ADR/RID: Special packing provisions for ADR/RID:

Mixed packing provisions: Portable tanks and bulk containers Instructions:

Portable tanks and bulk containers Special Provisions:

ADR Tank Code: ADR Tank special provisions:

Vehicle for tank carriage: Special provisions for carriage Packages:

Special provisions for carriage Bulk:

Special provisions for carriage for loading, unloading and handling:

Special Provisions for carriage Operation:

Hazard identification No: Transport category (Tunnel restriction code):

Sea transport (IMDG)

Marine Pollutant: Subsidiary risk(s) for IMDG: Packing provisions for IMDG: Limited quantities for IMDG:

Packing instructions for IMDG: IBC Instructions:
IBC Provisions: IMO tank instructions:
UN tank instructions: Tanks and bulk Provisions:

EmS: Stowage and segregation for IMDG:

Properties and observations:

Inland waterway transport (ADN)

Classification Code ADN: Special Provisions ADN:
Limited quantities ADN: Excepted quantities ADN:
Carriage permitted: Equipment required:

Provisions concerning loading and unloading:

Provisions concerning carriage: Number of blue cones/lights:

Remark:

Air transport (ICAO-TI / IATA-DGR)

Subsidiary risk for IATA: Excepted quantity for IATA:

Passenger and Cargo Aircraft Limited Quantities Packing Instructions:

Passenger and Cargo Aircraft Limited Quantities Maximal Net Quantity:

Passenger and Cargo Aircraft Packaging Instructions: Passenger and Cargo Aircraft Maximal Net Quantity:

Cargo Aircraft only Packaging Instructions:



Designation / Trade name: HTRF P-T prot. - Lysis Buf.6 (4X) 2 mL

Version: US, Page 13 of 13, Revision date: 23/10/2024

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:19/09/2024 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





Designation / Trade name: HTRF P-T prot. - Block. reag.(100X) 0.3 mL

Version: US, Page 1 of 12, Revision date: 03/10/2024

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

1.1 Product identifier:

Designation / Trade name: HTRF P-T prot. - Block. reag.(100X) 0.3 mL

CAS 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
Serious eye damage/eye irritation - Eye Irrit. 2 - H319	Eye Irrit. 2	H319	P264 P280 P305 + P351 + P338 P337 + P313

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. - Block. reag.(100X) 0.3 mL

Substances contained in this product:



Designation / Trade name: HTRF P-T prot. - Block. reag.(100X) 0.3 mL

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Hazard pictograms
GHS07-exclam



Signal word:

Warning

Hazard and precautionary statements:

Code	Hazard statments
H319	Causes serious eye irritation
P264	Wash thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.

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
disodium dihydrogenpyrophosphate	7758-16-9		IJ 31-835-()	Serious eye damage/eye irritation - Eye Irrit. 2 - H319	< 25%		
trisodium tetraoxovanadate	13721-39-6		237-287-9	Acute toxicity - Acute Tox. 4 - H302 - Oral Acute toxicity - Acute Tox. 4 - H312 - Dermal Acute toxicity - Acute Tox. 4 - H332 - Inhalation Serious eye damage/eye irritation - Eye Irrit. 2 - H319 Skin corrosion/irritation - Skin Irrit. 2 - H315	< 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: /



Designation / Trade name: HTRF P-T prot. - Block. reag.(100X) 0.3 mL

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5.3 Advice for fire-fighters

Wear Protective clothing.; Additional information:

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Emergency procedures: Provide adequate ventilation.;

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

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

6.4 Reference to other sections

Additional information:

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures:

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

Fire preventions:

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

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

7.2 Conditions for safe storage, including any incompatibilities

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

Hints on storage assembly:

Materials to avoid:

Further information on storage conditions:

7.3 Specific end uses:

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Preliminary remark:

8.1.1 Occupational exposure limits:



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• OSHA (USA)

Source :	Occupational Safe	ty and Health Admin	istration (OSHA) Permis	sible Exposure Limits (PEL	S) from 29 CFR 1910.100	00
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)
287-9	237-287-9	13721-39-6				0,05
7758-16-9 / 231-835- 0	231-835-0	7758-16-9				

Source :	TRGS 903, Novemb	TRGS 903, November 2015, BAuA										
Substance	EC-No.	CAS-No	BGW (mg/m3)	BGW (ppm)								
13721-39-6 / 237- 287-9	237-287-9	13721-39-6										
7758-16-9 / 231-835- 0	231-835-0	7758-16-9										

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

DNEL worker

Source :	GESTIS – su	ESTIS – 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)	cyctemic ettects	Long-term – inhalation, local effects (mg/m3)	systemic ettects						
13721-39-6 / 237-287-9	237-287-9	13721-39-6													
7758-16-9 / 231-835-0	231-835-0	7758-16-9					2.79-2.79								

• DNEL consumer

Source :	GESTIS – si	ESTIS – substance database													
Substance	EC-No.	CAS-No	Acute – dermal, local effects (mg/kg/day)	dermal, local	systemic ettects	Acute – inhalation, local effects (mg/m3)	cyctemic ettects	Long-term – inhalation, local effects (mg/m3)	systemic ettects						
13721-39-6 / 237-287-9	237-287-9	13721-39-6													
7758-16-9 / 231-835-0	231-835-0	7758-16-9													



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Source :	INERIS																
				PNEC AQUATIC									P	NEC Se	edimen	t	
Substance	EC-No.	CAS-No	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)
13721-39-6 / 237-287- 9		13721-39-6															
7758-16-9 / 231-835- 0	231-835-0	7758-16-9															

Source :	INERIS													
								Oth	ers					
Substance	EC-No.	CAS-No PNEC soil PNEC sewage treatment plant		PNEC air PNEC secon poisonin		EC second poisoning								
			(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)
13721-39-6 / 237-287-9	237-287-9	13721-39-6												
7758-16-9 / 231-835-0	231-835-0	7758-16-9												

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

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

	Concentration (mol/L)	Method	Temperature (°C)	Pressure (kPa)	Remark
рН					
Melting point (°C)					



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					\sim
Freezing point (°C)	·				
Initial boiling point/	/boiling range (°C)				
Flash point (°C)					
Evaporation rate (k	g/m²/h)				
Flammability (type	:) (%)				
Upper/lower flammability or exp limits					
	Lower explosive limit (%)				
Vapour pressure (ki	Pa)				
Vapour density (g/c	Vapour density (g/cm³)				
	Density (g/cm³)				
Densities	Relative density (g/cm ³)				
	Bulk density (g/cm³)				
	Critical density (g/cm ³)				
Solubility (Type:)	(g/L)				
Partition coefficient n-octanol/water at					
Auto-ignition tempe	erature (°C)				
Decomposition temperature (°C) Decomposition energy : kJ					
Viscosity	Viscosity, dynamic (poiseuille)				
	Viscosity, cinematic (cm³/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



Designation / Trade name: HTRF P-T prot. - Block. reag.(100X) 0.3 mL

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<u>Substances</u>

Acute toxicity

Animal data:

Acute oral toxicity:

Substance name	LD50 (mg/kg)	Species	Method	Symptoms / delayed effects	Remark
13721-39-6 / 237-287-9	330-330	Rat	Hemorragie		

Acute dermal toxicity:

Substance name	LD50 (mg/kg)	Species	Method	Remark
13721-39-6 / 237-287-9				

Acute inhalative toxicity:

Substance name	C(E)L50 (mg/L)	Exposure time	Species	Method	Remark
13721-39-6 / 237-287-9					

Practical experience / human evidence:

Assessment / Classification:

General Remark:

• Skin corrosion/irritation

Animal data:

Substance name	Species	Method	Exposure time	Result/evaluation	Score	Remark
13721-39-6 / 237-287-						
9						

In-vitro skin test method:

In-vitro skin test result:

Assessment / Classification:

• Eye damage/irritation

Animal data:

Substance name	Species	Method	Exposure time	Result/evaluation	Score	Remark
13721-39-6 / 237-287-						
9						
7758-16-9 / 231-835-0	Rabbit	OECD 405		Eye irritation		



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

- CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
 - o 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)
 - 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



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Practical experience / human evidence:

Experimental data: viscosity data: see SECTION 9.

Assessment / Classification:

Remark:

11.1.1 Mixtures

No toxicological information is available for the mixture itself

SECTION 12: ECOLOGICAL INFORMATION

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

12.1 Aquatic toxicity:

Acute (short-term) fish toxicity

Chronic (long-term) fish toxicity

Acute (short-term) toxicity to crustacea

Chronic (long-term) toxicity to crustacea

Acute (short-term) toxicity to algae and cyanobacteria

Toxicity to microorganisms and other aquatic plants / organisms

Assessment / Classification:

12.2 Persistence and degradability

Biodegradation:

Abiotic Degradation:

Assessment / Classification:

12.3 Bioaccumulative potential

Bioconcentration factor (BCF):

12.4 Mobility in soil

12.5 Results of PBT and vPvB assessment

12.6 Other adverse effects:

Additional ecotoxicological information:



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SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste treatment options:

Dispose of waste according to applicable legislation.;

Other disposal recommendations:

Additional information:

SECTION 14: TRANSPORT INFORMATION

ADR/RID/AND/IMDG/IATA

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

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

Land transport (ADR/RID)

Classification code ADR: Special Provisions for ADR/RID: Limited quantities for ADR/RID: Excepted Quantities for ADR/RID:

Packing Instructions for ADR/RID: Special packing provisions for ADR/RID:

Mixed packing provisions: Portable tanks and bulk containers Instructions:

Portable tanks and bulk containers Special Provisions:

ADR Tank Code: ADR Tank special provisions:

Vehicle for tank carriage: Special provisions for carriage Packages:

Special provisions for carriage Bulk:

Special provisions for carriage for loading, unloading and handling:

Special Provisions for carriage Operation:

Hazard identification No: Transport category (Tunnel restriction code):

Sea transport (IMDG)

Marine Pollutant: Subsidiary risk(s) for IMDG: Packing provisions for IMDG: Limited quantities for IMDG:

Packing instructions for IMDG: IBC Instructions:

IBC Provisions: IMO tank instructions:

UN tank instructions: Tanks and bulk Provisions:

EmS: Stowage and segregation for IMDG:

Properties and observations:

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:



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Air transport (ICAO-TI / IATA-DGR)

Subsidiary risk for IATA: Excepted quantity for IATA:

Passenger and Cargo Aircraft Limited Quantities Packing Instructions:

Passenger and Cargo Aircraft Limited Quantities Maximal Net Quantity:

Passenger and Cargo Aircraft Packaging Instructions: Passenger and Cargo Aircraft Maximal Net Quantity:

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

ERG code: Special Provisions for IATA:

SECTION 15: REGULATORY INFORMATION

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

15.2 Chemical Safety Assessment:

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

SECTION 16: OTHER INFORMATION

16.1 Indication of changes

Date of the previous version:02/10/2024 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
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled





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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. 2 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. 2 mL

Substances contained in this product:



Designation / Trade name: HTRF P-T prot. - Detect. Buf. 2 mL

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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:



Designation / Trade name: HTRF P-T prot. - Detect. Buf. 2 mL

Version: US, Page 3 of 12, Revision date: 09/09/2024

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	< 3%		
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.;



Designation / Trade name: HTRF P-T prot. - Detect. Buf. 2 mL

Version: US, Page 4 of 12, Revision date: 09/09/2024

Additional information:

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Emergency procedures: Provide adequate ventilation.;

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

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

6.4 Reference to other sections

Additional information:

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures:

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

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

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

7.2 Conditions for safe storage, including any incompatibilities

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

Hints on storage assembly:

Materials to avoid:

Further information on storage conditions:

7.3 Specific end uses:

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

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	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		7365-45-9									
7789-23-3 / 232-151- 5	232-151-5	7789-23-3									

Source :	TRGS 903, Novemb	er 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 <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)	Long-term – dermal, systemic effects (mg/kg/day)	Acute – inhalation, local effects (mg/m3)	cyctomic attacts	Long-term – inhalation, local effects (mg/m3)	cyctomic attacts
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 – sı	ubstance da	tabase						
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 ettects
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



Designation / Trade name: HTRF P-T prot. - Detect. Buf. 2 mL

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_																\sim	
			1	freshwate	r	m	marine water		intermittent release		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															
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 <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 <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

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)						



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				$\overline{}$
Flash point (°C)				
Evaporation rate	(kg/m²/h)			
Flammability (typ	pe:)(%)			
Upper/lower flammability or ex limits				
illilits	Lower explosive limit (%)			
Vapour pressure	(kPa)			
Vapour density (g	g/cm³)			
	Density (g/cm³)			
Densities	Relative density (g/cm³)			
	Bulk density (g/cm³)			
	Critical density (g/cm³)			
Solubility (Type :) (g/L)			
Partition coefficients of the properties of the				
Auto-ignition tem	nperature (°C)			
Decomposition temperature (°C) Decomposition energy : kJ				
Viscosity	Viscosity, dynamic (poiseuille)			
Viscosity, cinematic (cm ³ /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



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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)
 - o Germ cell mutagenicity:

Animal data:

Assessment / Classification:



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o 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 Mixtures

No toxicological information is available for the mixture itself



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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:



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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: Special Provisions for ADR/RID: Limited quantities for ADR/RID: Excepted Quantities for ADR/RID:

Packing Instructions for ADR/RID: Special packing provisions for ADR/RID:

Mixed packing provisions: Portable tanks and bulk containers Instructions:

Portable tanks and bulk containers Special Provisions:

ADR Tank Code: ADR Tank special provisions:

Vehicle for tank carriage: Special provisions for carriage Packages:

Special provisions for carriage Bulk:

Special provisions for carriage for loading, unloading and handling:

Special Provisions for carriage Operation:

Hazard identification No: Transport category (Tunnel restriction code):

Sea transport (IMDG)

Marine Pollutant: Subsidiary risk(s) for IMDG: Packing provisions for IMDG: Limited quantities for IMDG:

Packing instructions for IMDG: IBC Instructions:

IBC Provisions: IMO tank instructions:

UN tank instructions: Tanks and bulk Provisions:

EmS: Stowage and segregation for IMDG:

Properties and observations:

Inland waterway transport (ADN)

Classification Code ADN: Special Provisions ADN:
Limited quantities ADN: Excepted quantities ADN:
Carriage permitted: Equipment required:

Provisions concerning loading and unloading:

Provisions concerning carriage: Number of blue cones/lights:

Remark:

Air transport (ICAO-TI / IATA-DGR)

Subsidiary risk for IATA: Excepted quantity for IATA:

Passenger and Cargo Aircraft Limited Quantities Packing Instructions: Passenger and Cargo Aircraft Limited Quantities Maximal Net Quantity:

Passenger and Cargo Aircraft Packaging Instructions : Passenger and Cargo Aircraft Maximal Net Quantity :

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

ERG code: Special Provisions for IATA:



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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:03/09/2024 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
H301	Toxic if swallowed
H311	Toxic in contact with skin
H331	Toxic if inhaled

