

Safety Data Sheet

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



Designation / Commercial name : HTRF Lysis & Detect. Buf. 1 - 13 mL 62CL1FDD

Version: UK, Page 2 of 15, Revision date: 11/02/2022

Substances contained in this product:

Substance name	CAS n°	Index n°	EC n°
potassium fluoride	7789-23-3	009-005-00-2	232-151-5
Poly(oxy-1,2-ethanediyl), α -[4-(1,1,3,3-tetramethylbutyl)phenyl]- ω -hydroxy-	9002-93-1		

Hazard pictograms

GHS07-exclam



Signal word:

Warning

Hazard and precautionary statements:

Code	Hazard statments
H319	Causes serious eye irritation
H332	Harmful if inhaled
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash ... thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTRE/doctor/... if you feel unwell.
P337 + P313	If eye irritation persists: Get medical advice/attention.

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 and symptoms:

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Section 3 : Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients:

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

Additional information:

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

Section 4 : First aid measures

4.1 Description of first aid measures

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

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

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

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

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

Self-protection of the first aider:

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: No known symptoms to date. ;

Effects:

4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor:

Section 5 : Firefighting measures

5.1 Extinguishing media:

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

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: /

5.3 Advice for fire-fighters

Wear Protective clothing. ;

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Section 6 : Accidental release measures

6.1 *Personal precautions, protective equipment and emergency procedures*

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

6.2 *Environmental precautions*

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

6.3 *Methods and material for containment and cleaning up*

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

6.4 *Reference to other sections*

Additional information:

Section 7 : Handling and storage

7.1 *Precautions for safe handling*

Protective measures:

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

Fire preventions:

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

Advice on general occupational hygiene

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

7.2 *Conditions for safe storage, including any incompatibilities*

Technical measures and storage conditions:

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

Hints on storage assembly:

Materials to avoid:

Further information on storage conditions:

7.3 *Specific end uses:*

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

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Section 8 : Exposure controls/personal protection

8.1 Control parameters

Preliminary remark:

8.1.1 Occupational exposure limits:

- France

Substance	EC-No.	CAS-No	VLE (mg/m ³)	VLE (ppm)	VME (mg/m ³)	VME (ppm)
7778-77-0 / 231-913-4	231-913-4	7778-77-0				
7789-23-3 / 232-151-5	232-151-5	7789-23-3			2,5	

- Spain

Substance	EC-No.	CAS-No	VLA-EC (mg/m ³)	VLA-EC (ppm)	VLA-ED (mg/m ³)	VLA-ED (ppm)
7778-77-0 / 231-913-4	231-913-4	7778-77-0				
7789-23-3 / 232-151-5	232-151-5	7789-23-3				

- Germany

Substance	EC-No.	CAS-No	AGW (mg/m ³)	AGW (ppm)
7778-77-0 / 231-913-4	231-913-4	7778-77-0		
7789-23-3 / 232-151-5	232-151-5	7789-23-3		

- Italia

- Greece

- UK

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- OSHA (USA)

Source : Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELs) from 29 CFR 1910.1000						
Substance	EC-No.	CAS-No	OSHA Permissible Exposure Limit (PEL) 8-hour TWA (ppm)	OSHA Permissible Exposure Limit (PEL) 8-hour TWA (mg/m3)	OSHA Permissible Exposure Limit (PEL) STEL (ppm)	OSHA Permissible Exposure Limit (PEL) STEL (mg/m3)
7778-77-0 / 231-913-4	231-913-4	7778-77-0				
7789-23-3 / 232-151-5	232-151-5	7789-23-3				

8.1.2 Biological limit values (Germany):

Source : List of recommended health-based biological limit values (BLVs) and biological guidance values (BGVs), June 2014				
Substance	EC-No.	CAS-No	BLV (mg/m3)	BLV (ppm)
7778-77-0 / 231-913-4	231-913-4	7778-77-0		
7789-23-3 / 232-151-5	232-151-5	7789-23-3		

8.1.3 Exposure limits at intended use (Germany):

Source : TRGS 903, November 2015, BAuA				
Substance	EC-No.	CAS-No	BGW (mg/m3)	BGW (ppm)
7778-77-0 / 231-913-4	231-913-4	7778-77-0		
7789-23-3 / 232-151-5	232-151-5	7789-23-3		

8.1.4 DNEL/PNEC-values:

- DNEL worker

Source : GESTIS – substance database									
Substance	EC-No.	CAS-No	Acute – dermal, local effects (mg/kg/day)	Long-term – dermal, local effects (mg/kg/day)	Long-term – dermal, systemic effects (mg/kg/day)	Acute – inhalation, local effects (mg/m3)	Acute – inhalation, systemic effects (mg/m3)	Long-term – inhalation, local effects (mg/m3)	Long-term – inhalation, systemic effects (mg/m3)
7778-77-0 / 231-913-4	231-913-4	7778-77-0					4.07-4.07		
7789-23-3 / 232-151-5	232-151-5	7789-23-3				3-3	3-3		

- DNEL consumer

Source : GESTIS – substance database									
Substance	EC-No.	CAS-No	Acute – dermal, local effects (mg/kg/day)	Long-term – dermal, local effects (mg/kg/day)	Long-term – dermal, systemic effects (mg/kg/day)	Acute – inhalation, local effects (mg/m3)	Acute – inhalation, systemic effects (mg/m3)	Long-term – inhalation, local effects (mg/m3)	Long-term – inhalation, systemic effects (mg/m3)
7778-77-0 / 231-913-4	231-913-4	7778-77-0					4.07-4.07		
7789-23-3 / 232-151-5	232-151-5	7789-23-3				3-3	3-3		

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7778-77-0 / 231-913-4	231-913-4	7778-77-0															
7789-23-3 / 232-151-5	232-151-5	7789-23-3															

DNEL remark:

- PNEC

Source :		INERIS																	
Substance	EC-No.	CAS-No	PNEC AQUATIC									PNEC Sediment							
			freshwater			marine water			intermittent release			freshwater			marine water				
			(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)		
7778-77-0 / 231-913-4	231-913-4	7778-77-0																	
7789-23-3 / 232-151-5	232-151-5	7789-23-3																	

Source :		INERIS																	
Substance	EC-No.	CAS-No	Others																
			PNEC soil			PNEC sewage treatment plant			PNEC air			PNEC secondary poisoning							
			(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)	(mg/L)	(mg/kg)	(ppm)					
7778-77-0 / 231-913-4	231-913-4	7778-77-0																	
7789-23-3 / 232-151-5	232-151-5	7789-23-3																	

PNEC remark:

Control parameters remark:

8.2 Exposure controls

8.2.1 Appropriate engineering controls:

8.2.2 Personal protective equipment:

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

Skin protection: Gloves ; Laboratory coats ;

Respiratory protection: Ensure adequate ventilation ;

Thermal hazards:

8.2.3 Environmental exposure controls:

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Section 9 : Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

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

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

9.2 Other information:

No other relevant data available

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Section 10 : Stability and reactivity

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

10.2 Chemical stability

10.3 Possibility of hazardous reactions

10.4 Conditions to avoid:

10.5 Incompatible materials:

10.6 Hazardous decomposition products:

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

Section 11 : Toxicological information

Toxicokinetics, metabolism and distribution

11.1 Information on toxicological effects

Substances

- **Acute toxicity**

Animal data:

Acute oral toxicity:

Substance name	LD50 (mg/kg)	Species	Method	Symptoms / delayed effects	Remark
7789-23-3 / 232-151-5	245-245	Rat			
9002-93-1	1800-1800	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:

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- **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 (carcinogenicity, mutagenicity and toxicity for reproduction)**

- Germ cell mutagenicity:

Animal data:

Assessment / Classification:

- Carcinogenicity

Practical experience / human evidence:

Animal data:

Other information:

Assessment / Classification:

- Reproductive toxicity

Practical experience / human evidence:

Animal data:

Other information:

Assessment / Classification:

Overall assessment on CMR properties:

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

- STOT SE 1 and 2

Animal data:

Other information:

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- STOT SE 3

Practical experience / human evidence:

Other information:

Assessment / Classification:

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

Practical experience / human evidence:

Animal data:

Assessment / Classification:

Other information

- **Aspiration hazard**

Practical experience / human evidence:

Experimental data: viscosity data: see SECTION 9.

Assessment / Classification:

Remark:

11.1.1 Mixtures

No toxicological information is available for the mixture itself

Section 12 : Ecological information

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

12.1 Aquatic toxicity:

Acute (short-term) fish toxicity

Source :	Informations relatives à la réglementation VME (France) : ED 984, 07.2012									
Substance	EC-No.	CAS-No	LC50 (mg/L)	EC50 (mg/L)	Test duration	Species	Result/Evaluation	Method	Remark	General Remark
9002-93-1		9002-93-1	8,9		96	Pimephales promelas (fathead minnow)				

Chronic (long-term) fish toxicity

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

Acute (short-term) toxicity to crustacea

Source :	Informations relatives à la réglementation VME (France) : ED 984, 07.2012									
Substance	EC-No.	CAS-No	EC50	Test duration	Species	Result/	Method	Remark	General Remark	

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			(mg/L)			Evaluation			
9002-93-1		9002-93-1	26	48					

Chronic (long-term) toxicity to crustacea

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

Acute (short-term) toxicity to algae and cyanobacteria

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

Toxicity to microorganisms and other aquatic plants / organisms

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

Assessment / Classification:

12.2 Persistence and degradability

Biodegradation:

Source : Informations relatives à la réglementation VME (France) : ED 984, 07.2012							
Substance	EC-No.	CAS-No	Inoculum	Biodegradation parameter	Degradation rate (%)	Method	Remark
9002-93-1		9002-93-1		BOD (% of COD).	36-36		In accordance with the required stability the product is poorly biodegradable.

Abiotic Degradation:

Source :								
Substance	EC-No.	CAS-No	Abiotic degradation test type	Half-life time (j)	Temperature (°C)	pH	Method	Remark
9002-93-1		9002-93-1						

Assessment / Classification:

12.3 Bioaccumulative potential

Bioconcentration factor (BCF):

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

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12.4 Mobility in soil

Source :											
Substance	EC n°	CAS n°	Distribution	Transport type	Henry's law constant (Pa.m3/mol)	Log KOC	Half-life time in soil (j)	Half-life time in fresh water (j)	Half-life time in sea water (j)	Method	Remark
9002-93-1		9002-93-1									

12.5 Results of PBT and vPvB assessment

12.6 Other adverse effects:

Additional ecotoxicological information:

Section 13 : Disposal considerations

13.1 Waste treatment methods

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

Section 14 : Transport information

ADR/RID/AND/IMDG/IATA

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

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

Land transport (ADR/RID)

Classification code ADR:

Limited quantities for ADR/RID:

Packing Instructions for ADR/RID:

Mixed packing provisions:

Portable tanks and bulk containers Instructions:

Portable tanks and bulk containers Special Provisions:

ADR Tank Code:

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:

Special Provisions for ADR/RID:

Excepted Quantities for ADR/RID:

Special packing provisions for ADR/RID:

ADR Tank special provisions:

Transport category (Tunnel restriction code):

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Sea transport (IMDG)

Marine Pollutant:

Packing provisions for IMDG:

Packing instructions for IMDG:

IBC Provisions:

UN tank instructions:

EmS :

Properties and observations:

Subsidiary risk(s) for IMDG:

Limited quantities for IMDG:

IBC Instructions:

IMO tank instructions:

Tanks and bulk Provisions:

Stowage and segregation for IMDG:

Inland waterway transport (ADN)

Classification Code ADN:

Limited quantities ADN:

Carriage permitted:

Provisions concerning loading and unloading:

Number of blue cones/lights:

Special Provisions ADN:

Excepted quantities ADN:

Equipment required:

Provisions concerning carriage:

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

EU regulations

- Authorisations and/or restrictions on use:

Authorisations: 9002-93-1

Restrictions on use: 7789-23-3 / 232-151-5

SVHC :9002-93-1

- Other EU regulations:
- Directive 2010/75/EC on industrial emissions

Not relevant

National regulations

15.2 Chemical Safety Assessment:

For this mixture, no chemical safety assessment has been carried out

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Section 16 : Other information

16.1 Indication of changes

Date of the previous version:17/01/2022

Modifications:

16.2 Other informations

16.3 Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]:

See SECTION 2.1 (classification).

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

Code	Hazard statments
H301	Toxic if swallowed
H302	Harmful if swallowed
H311	Toxic in contact with skin
H315	Causes skin irritation
H318	Causes serious eye damage.
H331	Toxic if inhaled
H411	Toxic to aquatic life with long lasting effects