

Version	Revision Date:	Date of last issue: 16.08.2021
1.11	07.02.2022	Date of first issue: 18.05.2016

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1	Product identifier			
	Trade name	:	KAPA RiboErase (HMR)	
	Product code	:	07962266001	
1.2	Relevant identified uses of the	he s	ubstance or mixture and use	es advised against
	Recommended restrictions on use	:	For use in research only	
1.3	Details of the supplier of the			
	Company	:	Roche Diagnostics Deutschla	nd GmbH
			- Sandhoferstrasse 116 68305 Mannheim Deutschland	
	Telephone	:	+496217590	
	Telefax	:	+496217592890	
	Responsible Department		+49(0)621-759-4223	
	E-mail address	:	info.dia-sds@roche.com	
1.4	Emergency telephone numb	er		
	In case of emergencies:	:	Central Works Security Roche Diagnostics GmbH	+49(0)621-759-2203
	Centre for detoxification:	:	Mainz Munich	+49(0)6131-19240 +49(0)89-19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product is a kit consisting of individual ingredients. The classification of the ingredients can be obtained from section 3. Section Label elements contains the resulting labelling for the kit.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

2.3 Other hazards

Ecological information: This substance/mixture contains components considered to have endocrine disrupting properties for environment, according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.



Version	Revision Date:	Date of last issue: 16.08.2021
1.11	07.02.2022	Date of first issue: 18.05.2016

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

KAPA RiboErase Hybridization Buffer

Classification (REGULATION (EC) No 1272/2008) Not a hazardous substance or mixture.

Components

Remarks

: No hazardous ingredients

KAPA RiboErase Depletion Buffer

Classification (REGULATION (EC) No 1272/2008) Not a hazardous substance or mixture.

Components

Remarks : No hazardous ingredients

KAPA DNase Buffer

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

Components

Remarks : No	hazardous ingredients
--------------	-----------------------

KAPA RNase H

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

Components

Chemical name	CAS-No.	Classification	Concentration
	EC-No.		(% w/w)
	Index-No.		
	Registration number		
REACH - Candidate List of Substan	nces of Very High Conce	ern for Authorisation (Art	icle 59). :
alpha-(4-(1,1,3,3-	9002-93-1	Acute Tox. 4; H302	>= 0,1 - < 0,25
Tetramethylbutyl)phenyl)-omega-		Eye Dam. 1; H318	
hydroxypoly(oxy-1,2-ethanediyl)		Aquatic Chronic 2;	
		H411	



KAPA RiboErase (HMR)

Version	Revision Date:	Date of last issue: 16.08.2021
1.11	07.02.2022	Date of first issue: 18.05.2016

	Acute toxicity esti- mate	
	Acute oral toxicity: 500 mg/kg	

For explanation of abbreviations see section 16.

KAPA DNase

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

Components

Remarks : No hazardous ingredients

For explanation of abbreviations see section 16.

RiboErase Hybridization Oligos (HMR)

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

Components

Remarks : No hazardous ingredients

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	:	Do not leave the victim unattended.
If inhaled	:	Move to fresh air. If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	:	If on skin, rinse well with water.
In case of eye contact	:	Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a specialist.
If swallowed	:	Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person.



Version	Revision Date:	Date of last issue: 16.08.2021
1.11	07.02.2022	Date of first issue: 18.05.2016

If symptoms persist, call a physician. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed None known.

4.3 Indication of any immediate medical attention and special treatment needed

: The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Treatment

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-	:	No information available.
fighting		

5.3 Advice for firefighters

Special protective equipment for firefighters	:	Wear self-contained breathing apparatus for firefighting if nec- essary.
Further information	:	Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local cir- cumstances and the surrounding environment.

SECTION 6: Accidental release measures

• •	Even equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.			
6.2 Environmental precautions				
Environmental precautions	: Local authorities should be advised if significant spillages cannot be contained.			
6.3 Methods and material for containment and cleaning up				
Methods for cleaning up	: Wipe up with absorbent material (e.g. cloth, fleece). Keep in suitable, closed containers for disposal.			
6.4 Reference to other sections				
Treat recovered material as described in the section "Disposal considerations".				

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Revision Date:

Version



	Advice on safe handling	:	For perso	nal protection see section 8.
			boratory p pathogen optimize p measures Do not ea	I samples as if potentially infectious, using safe la- procedures. As the sensitivity and titer of potential s in the sample material can vary, the operator must bathogen inactivation and follow the appropriate according to local safety regulations. t, drink, or smoke in the laboratory area. bette by mouth.
	Advice on protection agair fire and explosion	st :	Normal m	easures for preventive fire protection.
	Hygiene measures	:	Handle in practice.	accordance with good industrial hygiene and safety
7.2 C	Conditions for safe storage	je, inc	luding any	incompatibilities
	Requirements for storage areas and containers	:		installations / working materials must comply with ological safety standards.
	Further information on stor age conditions	- :	See label	, package insert or internal guidelines
	Advice on common storag	e :	No mater	ials to be especially mentioned.
	Storage class (TRGS 510)	:	12, Non (Combustible Liquids
	Further information on stor age stability	- :	No decon	position if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s)

This product contains a substance on REACH Annex XIV 2 (substance of very high concern due to endocrine disrupting properties for the environment) at or above 0.1% w/w and may only be used under the exemption from authorisation for scientific research and development (including analytical activities, quality control and In-Vitro Diagnostics) under controlled conditions. Only trained and authorised personnel is allowed to handle the substance.

Date of last issue: 16.08.2021

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

KAPA RiboErase Hybridization Buffer

Contains no substances with occupational exposure limit values.

KAPA RiboErase Depletion Buffer

Contains no substances with occupational exposure limit values.



KAPA RiboErase (HMR)

Version	Revision Date:	Date of last issue: 16.08.2021
1.11	07.02.2022	Date of first issue: 18.05.2016

KAPA DNase Buffer

Contains no substances with occupational exposure limit values.

KAPA RNase H

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis	
glycerol	56-81-5	AGW (Inhalable fraction)	200 mg/m3	DE TRGS 900	
	Peak-limit: excursion factor (category): 2;(I)				
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child				

KAPA DNase

Occupational Exposure Limits

Components	CAS-No.	Value type (Form	Control parameters	Basis	
		of exposure)			
glycerol	56-81-5	AGW (Inhalable	200 mg/m3	DE TRGS	
	fraction)		_	900	
	Peak-limit: excursion factor (category): 2;(I)				
	Further information: When there is compliance with the OEL and biological				
	tolerance values, there is no risk of harming the unborn child				

RiboErase Hybridization Oligos (HMR)

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

. 2		
	Engineering measures No data available	
	Personal protective equipment	t
	Eye protection :	Safety glasses
		Use eye protection according to EN 166.
	Hand protection	
	Material : Break through time : Glove thickness :	In case of contact through splashing: Nitrile rubber > 30 min > 0,11 mm
	Material : Break through time : Glove thickness :	In case of full contact: butyl-rubber > 480 min > 0,4 mm

Version

Remarks

1.11

= 1		nucile
C) No. 1907/2006		
HMR)		
Revision Date:	Date of last issue: 16.08.2021	
07.02.2022	Date of first issue: 18.05.2016	
tions of Regula derived from it. product mentio	rotective gloves have to satisfy the spe tion (EU) 2016/425 and the standard E This recommendation is only valid for ned in the safety data sheet and provid	N 374 the led by

Booho

		tions of Regulation (EU) 2016/425 and the standard EN 374 derived from it. This recommendation is only valid for the product mentioned in the safety data sheet and provided by us and for the application specified by us. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Skin and body protection	:	Protective suit
Respiratory protection	:	No personal respiratory protective equipment normally re- quired.
Protective measures	:	Wear protective disposable gloves, laboratory coats and eye protection, when handling samples and kit reagents. Wash hands thoroughly after handling samples and reagents.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties KAPA RiboErase Hybridization Buffer

Physical state	:	liquid
Colour		colourless
Odour	:	odourless
Odour Threshold	:	No data available
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point	:	does not flash
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
рН	:	7,9
Viscosity		

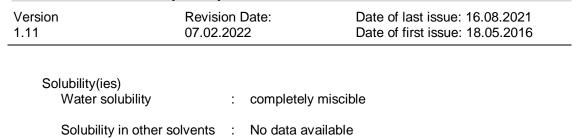
Version 1.11	Revision Date: 07.02.2022	Date of last issue: 16.08.2021 Date of first issue: 18.05.2016
Viscosity, dyr	namic : No data av	ailable
Viscosity, kind	ematic : No data av	ailable
Solubility(ies)		

Water solubility	:	completely miscible
Solubility in other solvents	:	No data available
Partition coefficient: n- octanol/water	:	No data available
Vapour pressure	:	No data available
Relative density	:	No data available
Density	:	1,068 g/cm3
Relative vapour density	:	No data available

KAPA RiboErase Depletion Buffer

Physical state	:	liquid
Colour	:	colourless
Odour	:	odourless
Odour Threshold	:	No data available
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point		does not flash
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
рН	:	No data available
Viscosity Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available





Roche

Partition coefficient: n- octanol/water	:	No data available
Vapour pressure	:	No data available
Relative density	:	No data available
Density	:	1,030 g/cm3
Relative vapour density	:	No data available

KAPA DNase Buffer

Physical state		liquid
Colour		colourless
Odour	:	odourless
Odour Threshold	:	No data available
Melting point/range		No data available
Boiling point/boiling range	:	No data available
Upper explosion limit / Upper flammability limit		No data available
Lower explosion limit / Lower flammability limit		No data available
Flash point		does not flash
Flash point Auto-ignition temperature	:	does not flash No data available
·	:	
Auto-ignition temperature		No data available
Auto-ignition temperature Decomposition temperature	:	No data available No data available
Auto-ignition temperature Decomposition temperature pH Viscosity	:	No data available No data available 7,9
Auto-ignition temperature Decomposition temperature pH Viscosity Viscosity, dynamic	:	No data available No data available 7,9 No data available



Version	Revision Date:	Date of last issue: 16.08.2021
1.11	07.02.2022	Date of first issue: 18.05.2016

Partition coefficient: n- octanol/water	:	No data available
Vapour pressure	:	No data available
Relative density	:	No data available
Density	:	1,03 g/cm3
Relative vapour density	:	No data available

KAPA RNase H

Physical state		liquid
Colour		colourless
Odour		odourless
Odour Threshold	:	No data available
Melting point/range		No data available
Boiling point/boiling range		No data available
Upper explosion limit / Upper flammability limit		No data available
Lower explosion limit / Lower flammability limit		No data available
Flash point		does not flash
Auto-ignition temperature		No data available
Decomposition temperature		No data available
рН	:	7,5
Viscosity Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Solubility(ies) Water solubility	:	completely miscible
Solubility in other solvents	:	No data available



1.11	07.02.2022	Date of first issue: 18.05.2016
Version	Revision Date:	Date of last issue: 16.08.2021

Vapour pressure	:	No data available
Relative density	:	No data available
Density	:	1,148 g/cm3
Relative vapour density	:	No data available

KAPA DNase

Physical state		liquid
Colour		colourless
Odour		odourless
Odour Threshold	:	No data available
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Upper explosion limit / Upper flammability limit		No data available
Lower explosion limit / Lower flammability limit		No data available
Flash point		does not flash
Auto-ignition temperature		No data available
Decomposition temperature		
Decomposition temperature	:	No data available
Decomposition temperature pH	:	No data available 7,5
	-	
pH Viscosity	:	7,5
pH Viscosity Viscosity, dynamic	:	7,5 No data available
pH Viscosity Viscosity, dynamic Viscosity, kinematic Solubility(ies)	:	7,5 No data available No data available
pH Viscosity Viscosity, dynamic Viscosity, kinematic Solubility(ies) Water solubility	:	7,5 No data available No data available completely miscible
pH Viscosity Viscosity, dynamic Viscosity, kinematic Solubility(ies) Water solubility Solubility in other solvents Partition coefficient: n-	:	7,5 No data available No data available completely miscible No data available
pH Viscosity Viscosity, dynamic Viscosity, kinematic Solubility(ies) Water solubility Solubility in other solvents Partition coefficient: n- octanol/water	: : : :	7,5 No data available No data available completely miscible No data available No data available



Version	Revision Date:	Date of last issue: 16.08.2021
1.11	07.02.2022	Date of first issue: 18.05.2016

Density	:	1,148 g/cm3
Relative vapour density	:	No data available

RiboErase Hybridization Oligos (HMR)

Physical state	:	liquid
Colour	:	colourless
Odour	:	No data available
Odour Threshold	:	No data available
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit		No data available
Flash point		does not flash
Auto-ignition temperature	:	No data available
Decomposition temperature		No data available
рН	:	7,7
pH Viscosity Viscosity, dynamic	:	7,7 No data available
Viscosity		
Viscosity Viscosity, dynamic	:	No data available
Viscosity Viscosity, dynamic Viscosity, kinematic Solubility(ies)	:	No data available No data available
Viscosity Viscosity, dynamic Viscosity, kinematic Solubility(ies) Water solubility	:	No data available No data available completely miscible
Viscosity Viscosity, dynamic Viscosity, kinematic Solubility(ies) Water solubility Solubility in other solvents Partition coefficient: n-	::	No data available No data available completely miscible No data available
Viscosity Viscosity, dynamic Viscosity, kinematic Solubility(ies) Water solubility Solubility in other solvents Partition coefficient: n- octanol/water	::	No data available No data available completely miscible No data available No data available
Viscosity Viscosity, dynamic Viscosity, kinematic Solubility(ies) Water solubility Solubility in other solvents Partition coefficient: n- octanol/water Vapour pressure	::	No data available No data available completely miscible No data available No data available



Version	Revision Date:
1.11	07.02.2022

9.2 Other information KAPA RiboErase Hybridization Buffer

Explosives	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Flammability (liquids)	:	Does not sustain combustion.
		The product is not flammable.
Self-ignition	:	Not applicable
Evaporation rate	:	No data available

KAPA RiboErase Depletion Buffer

Explosives	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Flammability (liquids)	:	Does not sustain combustion.
		The product is not flammable.
Self-ignition	:	Not applicable
Evaporation rate	:	No data available

KAPA DNase Buffer

Explosives	: Not explosive
Oxidizing properties	: The substance or mixture is not classified as oxidizing.
Flammability (liquids)	: Does not sustain combustion.
	The product is not flammable.
Self-ignition	: Not applicable
Evaporation rate	: No data available

KAPA RNase H

Explosives	: Not explosive
Oxidizing properties	: The substance or mixture is not classified as oxidizing.



Version	Revision Date:	Date of last issue: 16.08.2021
1.11	07.02.2022	Date of first issue: 18.05.2016

Flammability (liquids)	: Does not sustain combustion.
Self-ignition	: Not applicable
Evaporation rate	: No data available
KAPA DNase	
Explosives	: Not explosive
Oxidizing properties	: The substance or mixture is not classified as oxidizing.
Flammability (liquids)	: Does not sustain combustion.
Self-ignition	: Not applicable
Evaporation rate	: No data available

RiboErase Hybridization Oligos (HMR)

Explosives	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Flammability (liquids)	:	Does not sustain combustion.
		The product is not flammable.
Self-ignition	:	Not applicable
Evaporation rate	:	No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions	: No dangerous reaction known under conditions of normal use.

Stable under recommended storage conditions. No hazards to be specially mentioned.



Date of last issue: 16.08.2021 Date of first issue: 18.05.2016

KAPA RiboErase (HMR)

Version	Revision Date:
1.11	07.02.2022

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Materials to avoid : Strong oxidizing agents

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008 KAPA RiboErase Hybridization Buffer

Acute toxicity

Not classified based on available information.

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information. KAPA RiboErase Depletion Buffer

Acute toxicity

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006



KAPA RiboErase (HMR)

Version	Revision Date:	Date of last issue: 16.08.2021
1.11	07.02.2022	Date of first issue: 18.05.2016

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information. KAPA DNase Buffer

Acute toxicity

Not classified based on available information.

Skin corrosion/irritation

Not classified based on available information.

Serious eve damage/eve irritation

Not classified based on available information.

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity



KAPA RiboErase (HMR)

Version	Revision Date:	Date of last issue: 16.08.2021
1.11	07.02.2022	Date of first issue: 18.05.2016

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

KAPA RNase H

Acute toxicity

Not classified based on available information.

Components:

alpha-(4-(1,1,3,3-Tetramethylbutyl)phenyl)-omega-hydroxypoly(oxy-1,2-ethanediyl):

Acute oral toxicity	:	LD50 Oral (Rat): 1.900 - 5.000 mg/kg
		Acute toxicity estimate: 500 mg/kg Method: Expert judgement
Acute dermal toxicity	:	LD50 Dermal (Rabbit): > 3.000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Components:

alpha-(4-(1,1,3,3-Tetramethylbutyl)phenyl)-omega-hydroxypoly(oxy-1,2-ethanediyl):

Result	:	Risk of serious damage to eyes.
Remarks	:	May cause irreversible eye damage.

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure



VersionRevision Date:Date of last issue: 16.08.20211.1107.02.2022Date of first issue: 18.05.2016

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information. *KAPA DNase*

Acute toxicity

Not classified based on available information.

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information. *RiboErase Hybridization Oligos (HMR)*

Acute toxicity

Not classified based on available information.

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitisation

Skin sensitisation



KAPA RiboErase (HMR)

Version	Revision Date:	Date of last issue: 16.08.2021
1.11	07.02.2022	Date of first issue: 18.05.2016

Respiratory sensitisation

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

KAPA RiboErase Hybridization Buffer

Endocrine disrupting properties

Product:

Assessment

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

KAPA RiboErase Depletion Buffer

Endocrine disrupting properties

Product:

Assessment The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

KAPA DNase Buffer



Version	Revision Date:	Date of last issue: 16.08.2021
1.11	07.02.2022	Date of first issue: 18.05.2016

Endocrine disrupting properties

Product:

Assessment

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

KAPA RNase H

Endocrine disrupting properties

Product:

Assessment

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

KAPA DNase

Endocrine disrupting properties

Product:

Assessment :	The substance/mixture does not contain components consid- ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
--------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

RiboErase Hybridization Oligos (HMR)

Endocrine disrupting properties

Product:

Assessment

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: Ecological information

12.1 Toxicity

KAPA RiboErase Hybridization Buffer

No data available KAPA RiboErase Depletion Buffer

No data available KAPA DNase Buffer



Version	Revision Date:	Date of I
1.11	07.02.2022	Date of f

Date of last issue: 16.08.2021 Date of first issue: 18.05.2016

No data available KAPA RNase H

Components:

alpha-(4-(1,1,3,3-Tetramethylbutyl)phenyl)-omega-hydroxypoly(oxy-1,2-ethanediyl):				
Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): 4 - 8,9 mg/l Exposure time: 96 h		
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 18 - 26 mg/l Exposure time: 48 h		
Ecotoxicology Assessment				
Ecotoxicology Assessment Chronic aquatic toxicity	:	Toxic to aquatic life with long lasting effects.		
•••		Toxic to aquatic life with long lasting effects. Not expected to adsorb on soil.		

the environment

KAPA DNase

No data available

RiboErase Hybridization Oligos (HMR)

No data available

12.2 Persistence and degradability KAPA RiboErase Hybridization Buffer

No data available

KAPA RiboErase Depletion Buffer

No data available KAPA DNase Buffer

No data available KAPA RNase H

Components:

alpha-(4-(1,1,3,3-Tetramethylbutyl)phenyl)-omega-hydroxypoly(oxy-1,2-ethanediyl):

:

Biodegradability

Biodegradation: > 60 % Exposure time: 28 d Method: OECD Test Guideline 301B Remarks: According to the results of tests of biodegradability this product is not readily biodegradable.

KAPA DNase

No data available RiboErase Hybridization Oligos (HMR)

No data available

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006



KAPA RiboErase (HMR)

Version	Revision Date:	Date of last issue: 16.08.2021
1.11	07.02.2022	Date of first issue: 18.05.2016

12.3 Bioaccumulative potential KAPA RiboErase Hybridization Buffer

No data available KAPA RiboErase Depletion Buffer

No data available KAPA DNase Buffer

No data available KAPA RNase H

Components:

alpha-(4-(1,1,3,3-Tetramethylbutyl)phenyl)-omega-hydroxypoly(oxy-1,2-ethanediyl):		
Bioaccumulation	: Remarks: No bioaccumulation is to be expected (log Pow <= 4).	
	_	

Partition coefficient: n-	:	Remarks: No data available
octanol/water		

KAPA DNase

No data available **RiboErase Hybridization Oligos (HMR)**

No data available

12.4 Mobility in soil

KAPA RiboErase Hybridization Buffer

No data available KAPA RiboErase Depletion Buffer

No data available KAPA DNase Buffer

No data available

KAPA RNase H

No data available

KAPA DNase

No data available RiboErase Hybridization Oligos (HMR)

No data available

12.5 Results of PBT and vPvB assessment

KAPA RiboErase Hybridization Buffer

Not relevant KAPA RiboErase Depletion Buffer

Not relevant KAPA DNase Buffer

Not relevant KAPA RNase H



Version	Revision Date:
1.11	07.02.2022

Date of last issue: 16.08.2021 Date of first issue: 18.05.2016

Not relevant KAPA DNase

Not relevant RiboErase Hybridization Oligos (HMR)

Not relevant

12.6 Endocrine disrupting properties

Product:

Assessment

: This substance/mixture contains components considered to have endocrine disrupting properties for environment, according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

KAPA RiboErase Hybridization Buffer

Product:

Assessment	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at
		levels of 0.1% or higher.

KAPA RiboErase Depletion Buffer

	Assessment :	The substance/mixture does not contain components consid- ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
KA	PA DNase Buffer	
	Assessment :	The substance/mixture does not contain components consid- ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
KA	PA RNase H	
	Assessment :	This substance/mixture contains components considered to have endocrine disrupting properties for environment, according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.
	Components:	
	alpha-(4-(1,1,3,3-Tetramethylbu	ıtyl)phenyl)-omega-hydroxypoly(oxy-1,2-ethanediyl):
	Assessment :	The substance is considered to have endocrine disrupting properties according to REACH Article 57(f) for the environment.



Version	Revision Date:	Date of last issue: 16.08.2021
1.11	07.02.2022	Date of first issue: 18.05.2016

KAPA DNase

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

RiboErase Hybridization Oligos (HMR)

Assessment 2 The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

KAPA RiboErase Hybridization Buffer

No data available KAPA RiboErase Depletion Buffer

No data available KAPA DNase Buffer

No data available KAPA RNase H

No data available KAPA DNase

No data available RiboErase Hybridization Oligos (HMR)

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

The product contains a substance on REACH Annex XIV at 5 or above 0.1% w/w. Cartridges / rests of product to be disposed of as if it was hazardous waste. The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company. Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.



Version	Revision Date:
1.11	07.02.2022

Date of last issue: 16.08.2021 Date of first issue: 18.05.2016

Do not re-use empty containers.

SECTION 14: Transport information

14.1 UN number or ID number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Remarks

Not dangerous goods in the meaning of ADR/RID, ADN, IMDG-Code, ICAO/IATA-DGR

14.7 Maritime transport in bulk according to IMO instruments

5

Remarks	: Not applicable
---------	------------------

SECTION 15: Regulatory information

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

Seveso III: Directive : Not applicable 2012/18/EU of the European Parliament and of the Council on the control of majoraccident hazards involving dangerous substances.

Water hazard class (Germa- : WGK 1 slightly hazardous to water ny)

KAPA RiboErase Hybridization Buffer

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)	:	Not applicable
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	:	Not applicable
Regulation (EC) No 1005/2009 on substances that de-	:	Not applicable



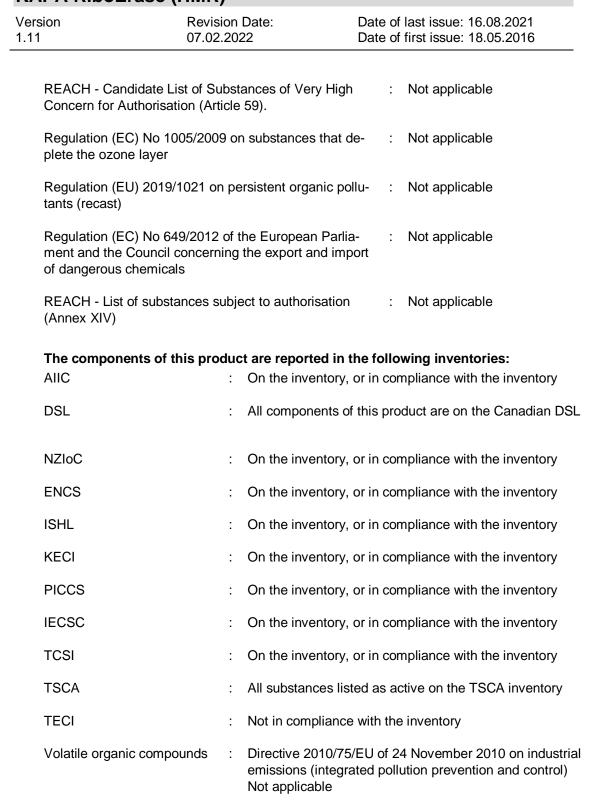
	Revision Date: 07.02.2022	Date of last issue: 16.08.2021 Date of first issue: 18.05.2016
plete the ozone layer		
Regulation (EU) 2019/10 tants (recast)	21 on persistent organic p	ollu- : Not applicable
- . ,	2012 of the European Parl ncerning the export and im	••
REACH - List of substand (Annex XIV)	ces subject to authorisation	n : Not applicable
The components of this	s product are reported in	the following inventories:
AIIC	•	r, or in compliance with the inventory
DSL	: All components	of this product are on the Canadian DSL
NZIoC	: On the inventory	, or in compliance with the inventory
ENCS	: On the inventory	r, or in compliance with the inventory
ISHL	: On the inventory	r, or in compliance with the inventory
KECI	: On the inventory	r, or in compliance with the inventory
PICCS	: On the inventory	r, or in compliance with the inventory
IECSC	: On the inventory	r, or in compliance with the inventory
TCSI	: On the inventory	r, or in compliance with the inventory
TSCA	: All substances li	sted as active on the TSCA inventory
TECI	: Not in compliance	e with the inventory
Volatile organic compour		5/EU of 24 November 2010 on industrial rated pollution prevention and control)

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

KAPA RiboErase Depletion Buffer

REACH - Restrictions on the manufacture, placing on	:	Not applicable
the market and use of certain dangerous substances,		
preparations and articles (Annex XVII)		

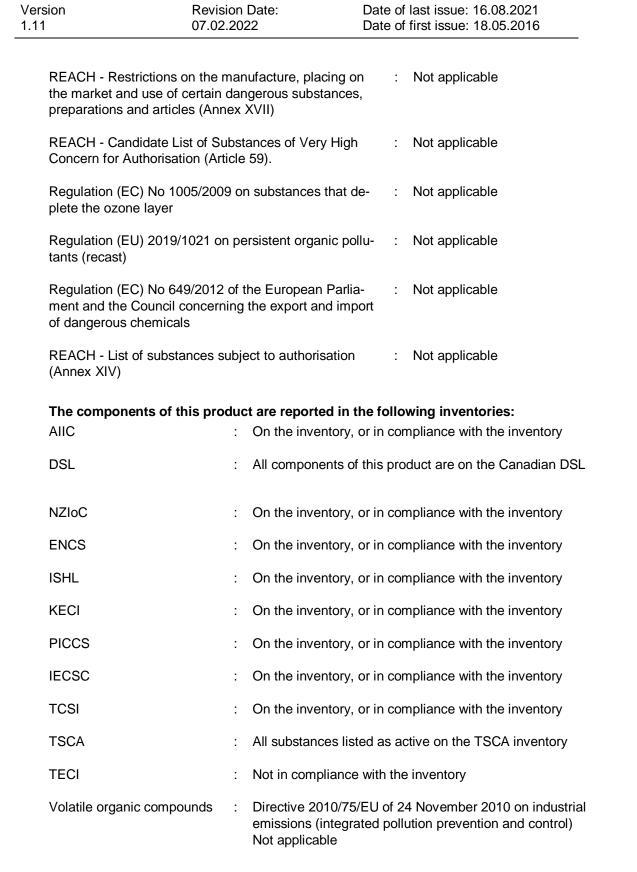


Roch

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

KAPA DNase Buffer



Roch

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.



1.11 07.02.2022 Date of first issue: 18.05.2016	Version	Revision Date:	Date of last issue: 16.08.2021
	1.11	07.02.2022	Date of first issue: 18.05.2016

KAPA RNase H

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)	:	Not applicable
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	:	alpha-(4-(1,1,3,3- Tetramethylbutyl)phenyl)-omega- hydroxypoly(oxy-1,2-ethanediyl)
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	:	Not applicable
Regulation (EU) 2019/1021 on persistent organic pollu- tants (recast)	:	Not applicable
Regulation (EC) No 649/2012 of the European Parlia- ment and the Council concerning the export and import of dangerous chemicals	:	Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	:	alpha-(4-(1,1,3,3- Tetramethylbutyl)phenyl)-omega- hydroxypoly(oxy-1,2-ethanediyl) For customers in the European Eco- nomic Area:, Contains SVHC:, oc- tyl/nonylphenol ethoxylates., For use in research and under controlled conditions only, – acc. to Art. 56.3 and 3.23 REACH Regulation.

The components of this pro-	duo	ct are reported in the following inventories:
AIIC	:	On the inventory, or in compliance with the inventory
DSL	:	All components of this product are on the Canadian DSL
NZIoC	:	On the inventory, or in compliance with the inventory
ENCS	:	Not in compliance with the inventory
ISHL	:	Not in compliance with the inventory
KECI	:	Not in compliance with the inventory
PICCS	:	On the inventory, or in compliance with the inventory
IECSC	:	On the inventory, or in compliance with the inventory
TCSI	:	On the inventory, or in compliance with the inventory



1.11 0	7.02.2022	Date of first issue: 18.05.2016
TSCA	: All substand	ces listed as active on the TSCA inventory
TECI	: Not in comp	liance with the inventory
Volatile organic compoun		10/75/EU of 24 November 2010 on industrial integrated pollution prevention and control) ole

Date of last issue: 16.08.2021

Labelling (REGULATION (EC) No 1272/2008)

Revision Date:

Not a hazardous substance or mixture.

KAPA DNase

Version

REACH - Restrictions on the manufacture, placing on : Not applicable the market and use of certain dangerous substances, preparations and articles (Annex XVII)				
REACH - Candidate List of Sub Concern for Authorisation (Artic			:	Not applicable
Regulation (EC) No 1005/2009 plete the ozone layer) or	n substances that de-	:	Not applicable
Regulation (EU) 2019/1021 on tants (recast)	pe	rsistent organic pollu-	:	Not applicable
Regulation (EC) No 649/2012 of the European Parlia- : Not a ment and the Council concerning the export and import of dangerous chemicals			Not applicable	
REACH - List of substances subject to authorisation : Not applicable (Annex XIV)			Not applicable	
The components of this prod	łuc	t are reported in the fo	مالد	wing inventories:
AllC	:	Not in compliance with		-
DSL	:	•		following components listed on the components are on the Canadian
		Nuclease, deoxyribo-		
NZIoC	:	On the inventory, or in	con	npliance with the inventory
ENCS	:	Not in compliance with	the	inventory
ISHL	:	Not in compliance with	the	inventory
KECI : On the inventory, or in compliance with the inventory			npliance with the inventory	



Version	Revision Date:	Date of last issue: 16.08.2021
1.11	07.02.2022	Date of first issue: 18.05.2016

PICCS	:	Not in compliance with the inventory
IECSC	:	On the inventory, or in compliance with the inventory
TCSI	:	On the inventory, or in compliance with the inventory
TSCA	:	All substances listed as active on the TSCA inventory
TECI	:	Not in compliance with the inventory
Volatile organic compounds	:	Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) Not applicable

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

RiboErase Hybridization Oligos (HMR)

REACH - Restrictions on the r the market and use of certain preparations and articles (Ann	angerous substances,				
REACH - Candidate List of Su Concern for Authorisation (Art					
Regulation (EC) No 1005/200 plete the ozone layer	on substances that de- : Not applicable				
Regulation (EU) 2019/1021 or tants (recast)	persistent organic pollu- : Not applicable				
Regulation (EC) No 649/2012 of the European Parlia- : Not applicable ment and the Council concerning the export and import of dangerous chemicals					
REACH - List of substances subject to authorisation : Not applicable (Annex XIV)					
The components of this product are reported in the following inventories:					
AIIC	: Not in compliance with the inventory				
DSL	This product contains the following components that are not on the Canadian DSL nor NDSL.				
	Primer / Oligonucleotide / Probe				
NZIoC	: On the inventory, or in compliance with the inventory				



Version	Revision Date:	Date of last issue: 16.08.2021
1.11	07.02.2022	Date of first issue: 18.05.2016

ENCS	:	Not in compliance with the inventory
ISHL	:	Not in compliance with the inventory
KECI	:	Not in compliance with the inventory
PICCS	:	Not in compliance with the inventory
IECSC	:	Not in compliance with the inventory
TCSI	:	Not in compliance with the inventory
TSCA	:	Product contains substance(s) not listed on TSCA inventory.
TECI	:	Not in compliance with the inventory
Volatile organic compounds	:	Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) Not applicable

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

15.2 Chemical safety assessment

Chemical Safety Assessments for all substances in this product are either Complete or Not applicable.

SECTION 16: Other information

Full text of H-Statements

H302	:	Harmful if swallowed.
H318	:	Causes serious eye damage.
H411	:	Toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Eye Dam.	:	Serious eye damage

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of



Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL -International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI -Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Roche

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

DE / EN / 2104