

Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

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

1.1	Product identifier			
	Trade name	:	MagNA Pure LC Total Nuclei	c Acid Isolation Kit
	Product code	:	03038505001	
1.2	Relevant identified uses of the	ne s	substance or mixture and use	es advised against
	Recommended restrictions on use	:	For use in research only	
1.3	Details of the supplier of the	saf	ety data sheet	
	Company	:	Roche Diagnostics Deutschla Sandhoferstrasse 116 68305 Mannheim Deutschland	ind GmbH
	Telephone	:	+496217590	
	Telefax	:	+496217592890	
	Responsible Department E-mail address		+49(0)621-759-4223 info.dia-sds@roche.com	
1.4	Emergency telephone number	er		
	In case of emergencies:	:	Central Works Security Roche Diagnostics GmbH	+49(0)621-759-2203
	Centre for detoxification:	:	Mainz	+49(0)6131-19240

### **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)





Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

		<ul> <li>H302 Harmful if swallowed.</li> <li>H314 Causes severe skin burns and eye damage.</li> <li>H317 May cause an allergic skin reaction.</li> <li>H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.</li> <li>H335 May cause respiratory irritation.</li> <li>H336 May cause drowsiness or dizziness.</li> <li>H412 Harmful to aquatic life with long lasting effects.</li> </ul>	
Supplemental Hazard Statements	:	EUH032 Contact with acids liberates very toxic gas.	
		EUH071 Corrosive to the respiratory tract.	
Precautionary statements	:	<ul> <li>Prevention:</li> <li>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</li> <li>P260 Do not breathe dust.</li> <li>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.</li> </ul>	
		<ul> <li>Response:</li> <li>P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.</li> <li>P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.</li> <li>P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.</li> <li>P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.</li> <li>P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.</li> </ul>	

### 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.

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**

# Wash Buffer I (d-WB I m/l)

### Classification (REGULATION (EC) No 1272/2008)

Flammable liquids,	Category 3
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H226: Flammable liquid and vapour.



Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

Acute toxicity, Category 4	H302: Harmful if swallowed.
Skin irritation, Category 2	H315: Causes skin irritation.
Eye irritation, Category 2	H319: Causes serious eye irritation.

### Components

Chemical name	CAS-No. EC-No. Index-No.	Classification	Concentration (% w/w)
	Registration number		
guanidinium chloride	50-01-1 200-002-3 607-148-00-0 01-2119977063-35	Acute Tox. 4; H302 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Acute toxicity esti- mate Acute oral toxicity: 475 mg/kg Acute inhalation tox- icity (dust/mist): 3,2 mg/l	>= 30,0 - < 50,0
ethanol	64-17-5 200-578-6 603-002-00-5 01-2119457610-43	Flam. Liq. 2; H225 Eye Irrit. 2; H319	>= 20,0 - < 30,0

For explanation of abbreviations see section 16.

# Wash Buffer II (WB II)

### Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 3 H226: Flammable liquid and vapour.

Eye irritation, Category 2

H319: Causes serious eye irritation.

### Components

Chemical name	CAS-No.	Classification	Concentration
	EC-No.		(% w/w)
	Index-No.		
	Registration number		
ethanol	64-17-5	Flam. Liq. 2; H225	>= 30,0 - <
	200-578-6	Eye Irrit. 2; H319	50,0
	603-002-00-5		
	01-2119457610-43		

For explanation of abbreviations see section 16.

# Wash Buffer III



# VersionRevision Date:Date of last issue: 13.08.20216.030.01.2022Date of first issue: 29.10.2012

### Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

### Components

Remarks

: No hazardous ingredients

For explanation of abbreviations see section 16.

# Lysis/Binding Buffer

# Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4	H302: Harmful if swallowed.
Skin corrosion, Sub-category 1C	H314: Causes severe skin burns and eye damage.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Long-term (chronic) aquatic hazard, Cat- egory 3	H412: Harmful to aquatic life with long lasting ef- fects.

### Components

Chemical name	CAS-No.	Classification	Concentration
	EC-No.		(% w/w)
	Index-No.		
	Registration number		
guanidinium thiocyanate	593-84-0	Acute Tox. 4; H302	>= 30,0 - <
	209-812-1	Acute Tox. 4; H332	50,0
	615-004-00-3	Acute Tox. 4; H312	
	01-2120735072-65	Skin Corr. 1C; H314	
		Eye Dam. 1; H318 Aquatic Chronic 3;	
		H412	
		EUH032, EUH071	
		Acute toxicity esti-	
		mate	
		Acute oral toxicity:	
	0000.00.4	593 mg/kg	
alpha-(4-(1,1,3,3-	9002-93-1	Acute Tox. 4; H302	>= 20,0 - <
Tetramethylbutyl)phenyl)-omega-		Eye Dam. 1; H318	25,0
hydroxypoly(oxy-1,2-ethanediyl)		Aquatic Chronic 2; H411	
		Acute toxicity esti-	
		mate	
		Acute oral toxicity:	
		500 mg/kg	

For explanation of abbreviations see section 16.



Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

# Proteinase K

Classification (REGULATION (EC) No 127	72/2008)
Skin irritation, Category 2	H315: Causes skin irritation.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Respiratory sensitisation, Category 1	H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Specific target organ toxicity - single ex- posure, Category 3, Respiratory system	H335: May cause respiratory irritation.

### Components

Chemical name	CAS-No.	Classification	Concentration
	EC-No.		(% w/w)
	Index-No.		
	Registration number		
Proteinase, Tritirachium album	39450-01-6	Skin Irrit. 2; H315	>= 70,0 - <
serine	254-457-8	Eye Irrit. 2; H319	90,0
	647-014-00-9	Resp. Sens. 1; H334	
		Skin Sens. 1; H317	
		STOT SE 3; H335	
		(Respiratory system)	

For explanation of abbreviations see section 16.

# Magnetic Glass Particles Suspension

### Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 2	H225: Highly flammable liquid and vapour.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Specific target organ toxicity - single exposure, Category 3, Central nervous	H336: May cause drowsiness or dizziness.

Components

system

Chemical name	CAS-No.	Classification	Concentration
	EC-No.		(% w/w)
	Index-No.		
	Registration number		
propan-2-ol	67-63-0	Flam. Liq. 2; H225	>= 90,0 - <=
	200-661-7	Eye Irrit. 2; H319	100,0
	603-117-00-0	STOT SE 3; H336	
	01-2119457558-25	(Central nervous	
		system)	

For explanation of abbreviations see section 16.



Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

## Elution Buffer

### 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 : Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended. If inhaled Call a physician or poison control centre immediately. Move to fresh air. If unconscious, place in recovery position and seek medical advice. In case of skin contact Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty. If on skin, rinse well with water. If on clothes, remove clothes, In case of eye contact Small amounts splashed into eyes can cause irreversible tis-: sue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Continue rinsing eyes during transport to hospital. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. If swallowed Clean mouth with water and drink afterwards plenty of water. Keep respiratory tract clear. Do NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

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

Symptoms :	No information available.
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Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

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

Treatment

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

### **SECTION 5: Firefighting measures**

5.1	Extinguishing media		
••••	Suitable extinguishing media	:	Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical
	Unsuitable extinguishing media	:	High volume water jet
5.2	Special hazards arising from	the	substance or mixture
	Specific hazards during fire- fighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
	Hazardous combustion prod- ucts	:	In case of fire hazardous decomposition products may be produced such as: Carbon oxides Nitrogen oxides (NOx) Sulphur oxides Hydrogen cyanide (hydrocyanic acid)
5.3	Advice for firefighters		
	Special protective equipment for firefighters	:	Wear self-contained breathing apparatus for firefighting if nec- essary.
	Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored sepa- rately in closed containments. Use a water spray to cool fully closed containers.

# **SECTION 6: Accidental release measures**

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

Personal precautions :	Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Refer to protective measures listed in sections 7 and 8. Beware of vapours accumulating to form explosive concentra- tions. Vapours can accumulate in low areas.
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Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

### **6.2 Environmental precautions**

Environmental precautions	:	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.
		5 1 5

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

Methods for cleaning up : Contain spillage, and then collect with non-combu sorbent material, (e.g. sand, earth, diatomaceous miculite) and place in container for disposal accor / national regulations (see section 13).
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### 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

Advice on safe handling	<ul> <li>Avoid formation of aerosol.</li> <li>Do not breathe vapours/dust.</li> <li>Avoid exposure - obtain special instructions before use.</li> <li>Avoid contact with skin and eyes.</li> <li>For personal protection see section 8.</li> <li>Smoking, eating and drinking should be prohibited in the application area.</li> <li>Take precautionary measures against static discharges.</li> <li>Provide sufficient air exchange and/or exhaust in work rooms.</li> <li>Open drum carefully as content may be under pressure.</li> <li>Dispose of rinse water in accordance with local and national regulations.</li> <li>Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.</li> <li>To prevent leaks or spillages from spreading, provide a suitable liquid retention system.</li> </ul>
Advice on protection against fire and explosion	Do not spray on a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.
Hygiene measures	When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.
7.2 Conditions for safe storage, in	cluding any incompatibilities
Requirements for storage areas and containers	No smoking. Keep container tightly closed in a dry and well- ventilated place. Containers which are opened must be care- fully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the techno-

Further information on stor-See label, package insert or internal guidelines 2

logical safety standards.



Version 6.0	Revision Date: 30.01.2022	Date of last issue: 13.08.2021 Date of first issue: 29.10.2012
age conditions Storage class (TRGS	510) : 3, Flammable I	iquids
Further information or age stability	stor- : No decomposit	tion if stored and applied as directed.
7.3 Specific end use(s)		
Specific use(s)	(substance of v properties for t only be used u entific research ties, quality co	ontains a substance on REACH Annex XIV very high concern due to endocrine disrupting he environment) at or above 0.1% w/w and may nder the exemption from authorisation for sci- n and development (including analytical activi- ntrol and In-Vitro Diagnostics) under controlled by trained and authorised personnel is allowed substance.

### **SECTION 8: Exposure controls/personal protection**

# 8.1 Control parameters

# Wash Buffer I (d-WB I m/l)

### **Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis	
ethanol	64-17-5	AGW	200 ppm 380 mg/m3	DE TRGS 900	
	Peak-limit: excursion factor (category): 4;(II)				
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child				

### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health ef- fects	Value
ethanol	Workers	Inhalation	Acute local effects	1900 mg/m3
	Workers	Dermal	Chronic effects	343 mg/kg
	Workers	Inhalation	Chronic effects	950 mg/m3

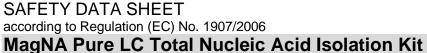
### Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
ethanol	Fresh water	0,96 mg/l
	Marine water	0,79 mg/l
	Fresh water sediment	3,6 mg/kg
	Soil	0,63 mg/kg

# Wash Buffer II (WB II)

### **Occupational Exposure Limits**

Components CAS-No	Value type (Form	Control parameters	Basis
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Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

		of exposure)			
ethanol	64-17-5	AGW	200 ppm	DE TRGS	
			380 mg/m3	900	
	Peak-limit: excursion factor (category): 4;(II)				
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child				

### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health ef-	Value
			fects	
ethanol	Workers	Inhalation	Acute local effects	1900 mg/m3
	Workers	Dermal	Chronic effects	343 mg/kg
	Workers	Inhalation	Chronic effects	950 mg/m3

### Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
ethanol	Fresh water	0,96 mg/l
	Marine water	0,79 mg/l
	Fresh water sediment	3,6 mg/kg
	Soil	0,63 mg/kg

# Wash Buffer III

Contains no substances with occupational exposure limit values.

# Lysis/Binding Buffer

### **Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
guanidinium thio- cyanate	593-84-0	IOEL	100 microgram per cubic meter	Category 1 (Roche Group Directive K1, Annex 3): OEL = 100 µg/m3

### Proteinase K

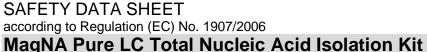
### **Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Proteinase, Tritira- chium album ser- ine	39450-01-6	IOEL	0,00006 mg/m3	Roche Indus- trial Hygiene Committee (RIHC)

# Magnetic Glass Particles Suspension

### **Occupational Exposure Limits**

Components CAS-No. Value type (Form   Control parameters   Basis
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Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

		of exposure)			
propan-2-ol	67-63-0	AGW	200 ppm	DE TRGS	
			500 mg/m3	900	
	Peak-limit: excursion factor (category): 2;(II)				
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child				

### **Biological occupational exposure limits**

Substance name	CAS-No.	Control parameters	Sampling time	Basis
propan-2-ol	67-63-0	Acetone: 25 mg/l (Blood)	Immediately after exposure or after working hours	TRGS 903
		Acetone: 25 mg/l (Urine)	Immediately after exposure or after working hours	TRGS 903

### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health ef- fects	Value
propan-2-ol	Workers	Dermal	Long-term systemic effects	888 mg/kg
	Workers	Inhalation	Long-term systemic effects	500 mg/m3

## Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
propan-2-ol	Fresh water	140,9 mg/l
	Marine water	140,9 mg/l
	Fresh water sediment	552 mg/kg
	Marine sediment	552 mg/kg
	Soil	28 mg/kg

# Elution Buffer

Contains no substances with occupational exposure limit values.

:

### 8.2 Exposure controls

### **Engineering measures**

No data available

### Personal protective equipment

Eye protection

Eye wash bottle with pure water Tightly fitting safety goggles Wear face-shield and protective suit for abnormal processing problems.

Use eye protection according to EN 166.

### Hand protection

		In case of contact through splashing:
Material	:	Nitrile rubber
Break through time	:	> 30 min
Glove thickness	:	> 0,11 mm

	Revision Date: 30.01.2022	Date of last issue: 13.08.2021 Date of first issue: 29.10.2012
Material Break through time Glove thickness	In case of butyl-rubbe > 480 min > 0,4 mm	full contact: er
Remarks	tions of Re derived fro product me us and for instruction which are into consic the product and the co	ed protective gloves have to satisfy the specifica- egulation (EU) 2016/425 and the standard EN 374 or it. This recommendation is only valid for the entioned in the safety data sheet and provided by the application specified by us. Please observe the s regarding permeability and breakthrough time provided by the supplier of the gloves. Also take leration the specific local conditions under which t is used, such as the danger of cuts, abrasion, ntact time. The suitability for a specific workplace discussed with the producers of the protective
Skin and body protectior	Choose bo	s clothing ody protection according to the amount and con- of the dangerous substance at the work place.
Respiratory protection	: In the case proved filte	e of vapour formation use a respirator with an ap- er.

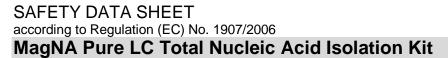
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# **SECTION 9: Physical and chemical properties**

SAFETY DATA SHEET

# 9.1 Information on basic physical and chemical properties *Wash Buffer I (d-WB I m/I)*

Physical state	:	liquid
Colour	:	colourless
Odour	:	characteristic
Odour Threshold	:	No data available
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flammability	:	Sustains combustion
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point	:	29 °C
Auto-ignition temperature	:	No data available



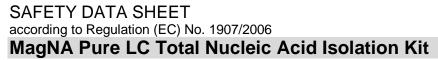


Version Revision Date:		Date of last issue: 13.08.2021		
6.0 30.01.2022		Date of first issue: 29.10.2012		

Decomposition temperature	:	No data available
рН	:	6,6 (25 °C)
Viscosity Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Solubility(ies) Water solubility	:	completely miscible
Solubility in other solvents	:	No data available
Partition coefficient: n- octanol/water	:	No data available
Vapour pressure	:	43 hPa
Relative density	:	No data available
Density	:	1,057 g/cm3
Relative vapour density	:	No data available

# Wash Buffer II (WB II)

Physical state	:	liquid
Colour	:	colourless
Odour	:	characteristic
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		25 °C
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
рН	:	7,4



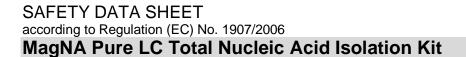


Version 6.0	Revision Date: 30.01.2022	Date of last issue: 13.08.2021 Date of first issue: 29.10.2012

Viscosity Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Solubility(ies) Water solubility	:	completely miscible
Solubility in other solvents	:	No data available
Partition coefficient: n- octanol/water	:	No data available
Vapour pressure	:	43 hPa
Relative density	:	No data available
Density	:	0,93 g/cm3
Relative vapour density	:	No data available

# Wash Buffer III

Physical state	:	liquid
Colour	:	colourless
Odour	:	none
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		No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
рН	:	4,0
Viscosity Viscosity, dynamic	:	No data available



Revision Date:

30.01.2022



Date of last issue: 13.08.2021

Date of first issue: 29.10.2012

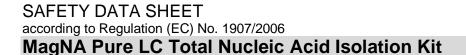
Viscosity, kinematic	: 1	No data available
Solubility(ies) Water solubility	: 1	No data available
Solubility in other solvents	: 1	No data available
Partition coefficient: n- octanol/water	: 1	No data available
Vapour pressure	: 1	No data available
Relative density	: 1	No data available
Relative vapour density	: 1	No data available

# Lysis/Binding Buffer

Version

6.0

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
Flammability	:	The product is not flammable., Does not sustain combustion.
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point		No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	Hazardous decomposition products formed under fire condi- tions.
рН	:	6,0 - 7,0
Viscosity Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Solubility(ies)		



Revision Date:

30.01.2022



Date of last issue: 13.08.2021

Date of first issue: 29.10.2012

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
Relative vapour density	:	No data available

# Proteinase K

Version

6.0

Physical state	:	solid, (lyophilised)
Colour	:	white
Odour	:	very faint
Odour Threshold	:	Not applicable
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flammability	:	Sustains combustion
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 Decomposes on heating. 6,5
Auto-ignition temperature Decomposition temperature pH Viscosity	:	No data available Decomposes on heating. 6,5 (as aqueous solution)
Auto-ignition temperature Decomposition temperature pH Viscosity Viscosity, dynamic	:	No data available Decomposes on heating. 6,5 (as aqueous solution) Not applicable



Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

Partition coefficient: n- octanol/water	:	No data available
Vapour pressure	:	No data available
Relative density	:	No data available
Bulk density	:	ca. 35 kg/m3
Relative vapour density	:	Not applicable

# Magnetic Glass Particles Suspension

Physical state	:	liquid
Colour	:	red brown
Odour	:	alcohol-like
Odour Threshold	:	No data available
Melting point/range	:	-89 °C
Boiling point/boiling range	:	82 °C
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point		12 °C
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
рН	:	7,0
Viscosity Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Solubility(ies) Water solubility	:	No data available
Solubility in other solvents	:	No data available
Partition coefficient: n- octanol/water	:	No data available



	evision E 0.01.2022		Date of last issue: 13.08.2021 Date of first issue: 29.10.2012
Vapour pressure	:	42 hPa (20 °C)	
Relative density	:	No data available	9
Density	:	0,78 g/cm3	
Relative vapour density	:	No data available	e
Elution Buffer			
Physical state	:	liquid	
Colour	:	colourless	
Odour	:	none	
Odour Threshold	:	No data available	e
Melting point/range	:	No data available	e
Boiling point/boiling range	e :	No data available	9
Flammability	:	The product is no	ot flammable., Does not sustain combustio
Upper explosion limit / Up flammability limit	per :	No data available	9
Lower explosion limit / Lo flammability limit	wer :	No data available	9
Flash point		No data available	9
Auto-ignition temperature	:	No data available	9
Decomposition temperate	ire :	No data available	9
рН	:	8,0	
Viscosity Viscosity, dynamic	:	No data available	9
Viscosity, kinematic	:	No data available	9
Solubility(ies) Water solubility	:	completely misci	ble
Solubility in other solv	ents :	No data available	e
Partition coefficient: n- octanol/water	:	No data available	9
Vapour pressure	:	No data available	9



Version 5.0	Revision Date: 30.01.2022	Date of last issue: 13.08.2021 Date of first issue: 29.10.2012
Relative density	: No data avail	able
Relative vapour density	: No data avail	able
9.2 Other information Wash Buffer I (d-WB I	m/l)	
Explosives	: Not explosive	
Oxidizing properties	: The substanc	e or mixture is not classified as oxidizing
Flammability (liquids)	: Sustains com	bustion
Self-ignition	: 425 °C	
Evaporation rate	: No data avail	able
Miscibility with water	: completely m	iscible
Wash Buffer II (WB II)		
Oxidizing properties	: The substanc	e or mixture is not classified as oxidizing
Self-ignition	: 425 °C	
Evaporation rate	: No data avail	able
Miscibility with water	: completely m	iscible
Wash Buffer III		
Explosives	: Not explosive	
Oxidizing properties	: The substanc	e or mixture is not classified as oxidizing
Self-ignition	: No data avail	able
Evaporation rate	: No data avail	able
Miscibility with water	: completely m	iscible
Lysis/Binding Buffer		
Explosives	: Not explosive	
Oxidizing properties	: The substanc	e or mixture is not classified as oxidizing
Flammability (liquids)	: Does not sus	ain combustion.



Revision Date: 30.01.2022	Date of last issue: 13.08.2021 Date of first issue: 29.10.2012
: No data ava	ilable
: No data ava	ilable
: completely	niscible
: Not explosiv	/e
: The substar	nce or mixture is not classified as oxidizing.
: Sustains co	mbustion
: No data ava	ilable
: No data ava	ilable
: No data ava	ilable
	30.01.2022 : No data ava : No data ava : completely n : Not explosiv : The substan : Sustains con : No data ava

# Magnetic Glass Particles Suspension

Oxidizing properties	: The substance or mixture is not classified as oxidizing.
Self-ignition	: 485 °C
Evaporation rate	: No data available
Miscibility with water	: completely miscible

# Elution Buffer

Explosives	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Flammability (liquids)	:	Does not sustain combustion.
Self-ignition	:	No data available
Evaporation rate	:	No data available
Miscibility with water	:	completely miscible



Version	Revision Date:
6.0	30.01.2022

Date of last issue: 13.08.2021 Date of first issue: 29.10.2012

### **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	<ul> <li>Toxic gases may be released if in contact with the following: sodium hypochlorite Acids</li> <li>Strong oxidizing agents</li> <li>No decomposition if stored and applied as directed.</li> </ul>
	Vapours may form explosive mixture with air.

### 10.4 Conditions to avoid

Conditions to avoid	: Heat, flames and sparks.
---------------------	----------------------------

### **10.5 Incompatible materials**

Materials to avoid

: Strong acids Strong oxidizing agents Cyanides sodium hypochlorite

### **10.6 Hazardous decomposition products**

In case of fire hazardous decomposition products may be produced such as: Carbon oxides Nitrogen oxides (NOx) Sulphur oxides Hydrogen cyanide (hydrocyanic acid)

## **SECTION 11: Toxicological information**

# 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008 Wash Buffer I (d-WB I m/l)

Acute toxicity Harmful if swallowed.

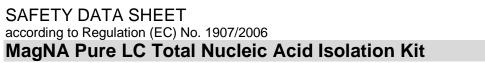
### **Components:**

### guanidinium chloride:

Acute oral toxicity

: LD50 Oral (Rat, female): 475 mg/kg Method: OECD Test Guideline 401 GLP: yes

Acute toxicity estimate: 475 mg/kg Method: Calculation method





Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

Acute inhalation toxicity	LC50 (Rat, female): 3,2 mg Exposure time: 4 h Test atmosphere: dust/mis Method: OECD Test Guide GLP: yes	t
	LC50 (Rat, male and femal Exposure time: 4 h Test atmosphere: dust/mis Method: OECD Test Guide GLP: yes	t
	LC50 (Rat, male): 7,7 mg/l Exposure time: 4 h Test atmosphere: dust/mis Method: OECD Test Guide GLP: yes	
	Acute toxicity estimate: 3,2 Test atmosphere: dust/mis Method: Calculation metho	t
Acute dermal toxicity	Method: OECD Test Guide GLP: yes	e or mixture has no acute dermal
ethanol:		
Acute oral toxicity	LD50 (Rat, male and femal Method: OECD Test Guide GLP: no	
Acute inhalation toxicity	LC50 (Rat, male and femal Exposure time: 4 h Test atmosphere: vapour Method: OECD Test Guide GLP: no	
Acute dermal toxicity	(Rabbit): 17.100 mg/kg GLP: No information availa Remarks: Based on data fr	
Skin corrosion/irritation Causes skin irritation.		
Components:		
guanidinium chloride:		
Species Exposure time Result	Rabbit 24 h Irritating to skin.	



	last issue: 13.08.2021 first issue: 29.10.2012
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# GLP

: yes

### ethanol:

Species	:	Rabbit
Exposure time	:	24 h
Method	:	OECD Test Guideline 404
Result	:	No skin irritation
GLP	:	yes

### Serious eye damage/eye irritation

Causes serious eye irritation.

### **Components:**

### guanidinium chloride:

405
•

## ethanol:

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	Irritating to eyes.
GLP	:	No information available.

### Respiratory or skin sensitisation

### Skin sensitisation

Not classified based on available information.

### **Respiratory sensitisation**

Not classified based on available information.

### **Components:**

### guanidinium chloride:

### ethanol:

Test Type	:	Maximisation Test
Species	:	Guinea pig
Assessment	:	Does not cause skin sensitisation.
Method	:	OECD Test Guideline 406
Result	:	Did not cause sensitisation on laboratory animals.
GLP	:	no
Remarks	:	Based on data from similar materials

	A SHEET lation (EC) No. 1907/2006 • LC Total Nucleic Acio	d Isolation Kit
Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012



### Germ cell mutagenicity

Not classified based on available information.

### **Components:** guanidinium chloride: Genotoxicity in vitro Test Type: Microbial mutagenesis assay (Ames test) 2 Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative GLP: yes Test Type: Chromosome aberration test in vitro Test system: Chinese hamster fibroblasts Method: OECD Test Guideline 473 **Result:** negative GLP: no ethanol: Genotoxicity in vitro Test Type: Microbial mutagenesis assay (Ames test) 2 Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 **Result:** negative GLP: No information available. Test Type: In vitro mammalian cell gene mutation test Test system: mouse lymphoma cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 **Result:** negative GLP: No information available. Genotoxicity in vivo Test Type: dominant lethal test Species: Mouse (male) **Application Route: Oral** Dose: 10 or 40% ethanol in water

### Carcinogenicity

Not classified based on available information.

### Components:

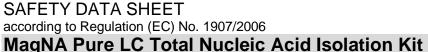
### ethanol:

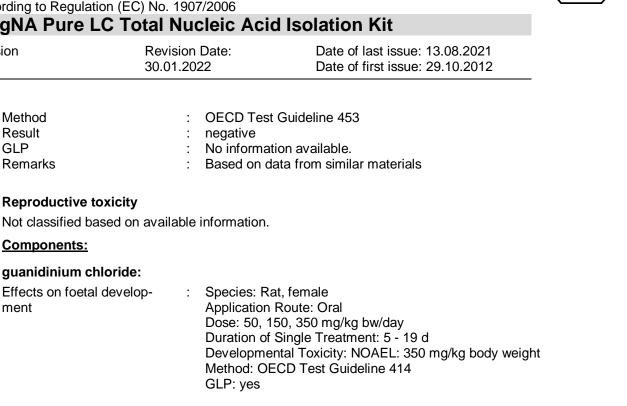
Species	: Mouse, male and female
Application Route	: inhalation (vapour)
Exposure time	: 18 month(s)
Control Group	: yes
Frequency of Treatment	: 19 hours/day

Method: OECD Test Guideline 478

GLP: No information available.

**Result:** negative





Roch

### ethanol:

ment

Version

Method

Result

Remarks

**Components:** 

GLP

6.0

Effects on fertility	:	Test Type: Two-generation study Species: Mouse, male and female Application Route: Oral General Toxicity - Parent: NOAEL: 20.700 mg/kg body weight Method: OECD Test Guideline 416 Result: No effects on fertility GLP: No information available.
Effects on foetal develop- ment	:	Species: Rat, female Strain: Sprague-Dawley Application Route: Ingestion Duration of Single Treatment: 6 Weeks Developmental Toxicity: NOAEL: 5.200 mg/kg body weight GLP: No information available.

### STOT - single exposure

Not classified based on available information.

### **STOT - repeated exposure**

Not classified based on available information.

### Repeated dose toxicity

### **Components:**

### guanidinium chloride:

:	Rat, male and female
:	100 mg/kg
:	Oral
:	90 d
:	25, 100, 300 mg/kg bw/day
:	OECD Test Guideline 408
:	yes
	: :



Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

# ethanol:

Species	: Rat, male and female
LOAEL	: 3156 mg/kg
Application Route	: Oral
Exposure time	: 14 Weeks
Dose	: 0, 5, 10, 20 mg/Kg
Method	: OECD Test Guideline 408
GLP	: yes

### Aspiration toxicity

Not classified based on available information. *Wash Buffer II (WB II)* 

### Acute toxicity

Not classified based on available information.

### Components:

### ethanol:

Acute oral toxicity	:	LD50 (Rat, male and female): 10.470 mg/kg Method: OECD Test Guideline 401 GLP: no
Acute inhalation toxicity	:	LC50 (Rat, male and female): 124,7 mg/l Exposure time: 4 h Test atmosphere: vapour Method: OECD Test Guideline 403 GLP: no
Acute dermal toxicity	:	(Rabbit): 17.100 mg/kg GLP: No information available. Remarks: Based on data from similar materials

### Skin corrosion/irritation

Not classified based on available information.

### Components:

### ethanol:

Species Exposure time Method Result GLP Rabbit
24 h
OECD Test Guideline 404
No skin irritation
yes

### Serious eye damage/eye irritation

Causes serious eye irritation.

### **Components:**

### ethanol:

	Rabbit DECD Test Guideline 405
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Revision Date:

Version



Date of last issue: 13.08.2021

6.0	30.01.2022	Date of first issue: 29.10.2012
Result GLP	: Irritating to : No informa	eyes. ation available.
Respiratory or	skin sensitisation	
Skin sensitisa Not classified b	tion ased on available information	
Respiratory se		
	ased on available information	
Components:		
<b>ethanol:</b> Test Type Species Assessment Method Result GLP	: OECD Tes	
Remarks	: Based on o	data from similar materials
Germ cell mut Not classified b <u>Components:</u>	agenicity ased on available information	
ethanol:		
Genotoxicity in	Test syste Metabolic Method: O Result: ne	Microbial mutagenesis assay (Ames test) m: Salmonella typhimurium activation: with and without metabolic activation ECD Test Guideline 471 gative nformation available.
	Test syste Metabolic Method: O Result: ne	In vitro mammalian cell gene mutation test m: mouse lymphoma cells activation: with and without metabolic activation ECD Test Guideline 476 gative nformation available.
Genotoxicity in	Species: M Application Dose: 10 c Method: O Result: ne	dominant lethal test fouse (male) n Route: Oral or 40% ethanol in water ECD Test Guideline 478 gative nformation available.

### Carcinogenicity

Not classified based on available information.



Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

### **Components:**

### ethanol:

Application Route: inhalation (vapour)Exposure time: 18 month(s)Control Group: yesFrequency of Treatment: 19 hours/dayMethod: OECD Test Guideline 453Result: negativeGLP: No information available.	Species	:	Mouse, male and female
Control Group: yesFrequency of Treatment: 19 hours/dayMethod: OECD Test Guideline 453Result: negativeGLP: No information available.	Application Route	:	inhalation (vapour)
Frequency of Treatment:19 hours/dayMethod:OECD Test Guideline 453Result:negativeGLP:No information available.	Exposure time	:	18 month(s)
Method:OECD Test Guideline 453Result:negativeGLP:No information available.	Control Group	:	yes
Result: negativeGLP: No information available.	Frequency of Treatment	:	19 hours/day
GLP : No information available.	Method	:	OECD Test Guideline 453
	Result	:	negative
	GLP	:	No information available.
Remarks : Based on data from similar materials	Remarks	:	Based on data from similar materials

### **Reproductive toxicity**

Not classified based on available information.

### **Components:**

### ethanol:

Effects on fertility :	Test Type: Two-generation study Species: Mouse, male and female Application Route: Oral General Toxicity - Parent: NOAEL: 20.700 mg/kg body weight Method: OECD Test Guideline 416 Result: No effects on fertility GLP: No information available.
Effects on foetal develop- : ment	Species: Rat, female Strain: Sprague-Dawley Application Route: Ingestion Duration of Single Treatment: 6 Weeks Developmental Toxicity: NOAEL: 5.200 mg/kg body weight GLP: No information available.

### STOT - single exposure

Not classified based on available information.

### STOT - repeated exposure

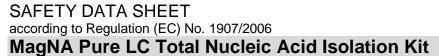
Not classified based on available information.

### **Repeated dose toxicity**

### Components:

### ethanol:

Species	:	Rat, male and female
LÖAEL	:	3156 mg/kg
Application Route	:	Oral
Exposure time	:	14 Weeks
		0, 5, 10, 20 mg/Kg
Method	:	OECD Test Guideline 408
GLP	:	yes





Version Revision Date: 6.0 30.01.2022

Date of last issue: 13.08.2021 Date of first issue: 29.10.2012

### Aspiration toxicity

Not classified based on available information. *Wash Buffer III* 

### 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.

### Lysis/Binding Buffer

### Acute toxicity

Harmful if swallowed.

### **Components:**

### guanidinium thiocyanate:

Acute oral toxicity	:	LD50 Oral (Rat, female): 593 mg/kg Method: OECD Test Guideline 401 Symptoms: Vomiting GLP: yes
		Acute toxicity estimate: 593 mg/kg Method: Calculation method
Acute inhalation toxicity	:	Assessment: Corrosive to the respiratory tract., The component/mixture is moderately toxic after short term inhalation.



Version 6.0	Revision Date: 30.01.2022	Date of last issue: 13.08.2021 Date of first issue: 29.10.2012
Acute dermal toxicity	: Assessment: single contac	The component/mixture is moderately toxic to with skin.
alpha-(4-(1,1,3,3-Tetra	amethylbutyl)phenyl)-o	mega-hydroxypoly(oxy-1,2-ethanediyl):
Acute oral toxicity		Rat): 1.900 - 5.000 mg/kg
		y estimate: 500 mg/kg ert judgement
Acute dermal toxicity	: LD50 Derma	l (Rabbit): > 3.000 mg/kg
Skin corrosion/irritati	on	
Causes severe burns.		
Components:		
guanidinium thiocyar	nate:	
Species Exposure time Method Result		Guideline 404 er 1 to 4 hours of exposure

: yes

# Serious eye damage/eye irritation

Causes serious eye damage.

### Components:

GLP

### 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.

:

### Components:

### guanidinium thiocyanate:

Genotoxicity in vitro

Test Type: Microbial mutagenesis assay (Ames test) Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative GLP: yes

Test Type: Chromosome aberration test in vitro



Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

Test system: Human lymphocytes Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: negative GLP: no

Test Type: gene mutation test Test system: mouse lymphoma cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative GLP: yes

### Carcinogenicity

Not classified based on available information.

### Reproductive toxicity

Not classified based on available information.

### **Components:**

### guanidinium thiocyanate:

Effects on fertility	:	Species: Rat, female Application Route: Oral Dose: 25 GLP: no Remarks: No significant adverse effects were reported Based on data from similar materials
Effects on foetal develop- ment	:	Species: Rat, female Application Route: Oral Dose: 50, 150, 350 mg/kg bw/day General Toxicity Maternal: NOAEL: 150 mg/kg bw/day Embryo-foetal toxicity: NOAEL: 350 mg/kg body weight Method: OECD Test Guideline 414

GLP: yes

### STOT - single exposure

Corrosive to the respiratory tract.

### STOT - repeated exposure

Not classified based on available information.

### Repeated dose toxicity

### **Components:**

### guanidinium thiocyanate:

Species NOAEL Application Route Exposure time Number of exposures Dose	:	Rat, male and female 100 mg/kg Oral 90 d daily 25, 100, 300 mg/kg bw/day
Dose		
Method	:	OECD Test Guideline 408



Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

GLP : yes

### Aspiration toxicity

Not classified based on available information.

# Proteinase K

### Acute toxicity

Not classified based on available information.

### Skin corrosion/irritation

Causes skin irritation.

### Components:

### Proteinase, Tritirachium album serine:

Result	:	Irritating to skin.
Remarks	:	May cause skin irritation and/or dermatitis.

### Serious eye damage/eye irritation

Causes serious eye irritation.

### Components:

### Proteinase, Tritirachium album serine:

Result:Irritating to eyes.Remarks:May cause irreversible eye damage.

### Respiratory or skin sensitisation

### Skin sensitisation

May cause an allergic skin reaction.

### Respiratory sensitisation

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

### Components:

### Proteinase, Tritirachium album serine:

	May cause sensitisation by skin contact. Causes sensitisation.

Assessment

May cause sensitisation by inhalation.

### Germ cell mutagenicity

Not classified based on available information.

### Carcinogenicity

Not classified based on available information.

### Reproductive toxicity

Not classified based on available information.



Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

### STOT - single exposure

May cause respiratory irritation.

### **Components:**

# Proteinase, Tritirachium album serine:

Assessment May cause respiratory irritation. :

:

### STOT - repeated exposure

Not classified based on available information.

### **Components:**

### Proteinase, Tritirachium album serine:

Assessment

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

### Aspiration toxicity

Not classified based on available information.

### **Components:**

Proteinase, Tritirachium album serine: No data available

### Magnetic Glass Particles Suspension

### Acute toxicity

Not classified based on available information.

### **Components:**

### propan-2-ol:

Acute oral toxicity :	LD50 (Rat): 5.840 mg/kg Method: OECD Test Guideline 401 GLP: no
Acute inhalation toxicity :	LC50 (Rat, male and female): > 10000 ppm Exposure time: 6 h Test atmosphere: vapour Method: OECD Test Guideline 403 GLP: yes
Acute dermal toxicity :	LD50 (Rabbit): 13.900 mg/kg Method: OECD Test Guideline 402 GLP: no

### Skin corrosion/irritation

Not classified based on available information.

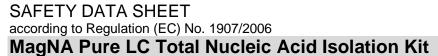
5

Rabbit

### Components:

### propan-2-ol:

Species





Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

Exposure time	:	4 h
Result	:	No skin irritation
GLP	:	no

### Serious eye damage/eye irritation

Causes serious eye irritation.

### **Components:**

### propan-2-ol:

Species :	Rabbit
Method :	OECD Test Guideline 405
Result :	Irritating to eyes.
GLP :	no
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.

### Components:

### propan-2-ol:

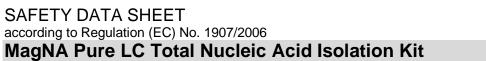
Test Type	:	Buehler Test
Species	:	Guinea pig
Assessment	:	Does not cause skin sensitisation.
Method	:	OECD Test Guideline 406
GLP	:	yes

### Germ cell mutagenicity

Not classified based on available information.

### **Components:**

propan-2-ol:		
Genotoxicity in vitro	Test Type: In vitro mammalian cell gene mutation test Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative GLP: yes	
	Test Type: Microbial mutagenesis assay (Ames test) Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative GLP: no	
Genotoxicity in vivo	Test Type: In vivo micronucleus test	





sion	Revision Date: 30.01.2022	Date of last issue: 13.08.2021 Date of first issue: 29.10.2012
	Cell type: Application	<i>I</i> ouse (male and female) Bone marrow n Route: Intraperitoneal injection DECD Test Guideline 474 gative
Carcinogenicity Not classified based	d on available information	
Components:		
<b>propan-2-ol:</b> Species Application Route Exposure time Frequency of Treate Method GLP	: inhalation : 104 weeks ment : 5 days/we	5
Reproductive toxic	<b>city</b> I on available information	
Components:		
propan-2-ol:		
Effects on fertility	Application General T	Rat, male and female n Route: Oral oxicity - Parent: NOAEL: 853 mg/kg body weig DECD Test Guideline 415
Effects on foetal de ment	Application	Rat, male and female n Route: Oral , 1242, 1605 mg/kg bw/day f Single Treatment: 6 - 16 d

May cause drowsiness or dizziness.

### **Components:**

propan-2-ol:

Assessment

: May cause drowsiness or dizziness.

### STOT - repeated exposure

Not classified based on available information.



Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

### **Repeated dose toxicity**

### **Components:**

propan-2-ol:
--------------

Species :	Rat, male and female
NOAEC :	5000
Application Route :	Inhalation
Test atmosphere :	vapour
Exposure time :	104 Weeks
Dose :	500, 2500, 5000 ppm parts per million
GLP :	yes

### Aspiration toxicity

Not classified based on available information.

### **Elution 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.

### 11.2 Information on other hazards

### **Endocrine disrupting properties**

### Product:

	(EC) No. 1907/2006 Total Nucleic Aci	d Isolation Kit	
ersion	Revision Date:	Date of last issue: 13.08.2021	
.0	30.01.2022	Date of first issue: 29.10.2012	
Assessment	ered to hav REACH Ar (EU) 2017/	Ince/mixture does not contain components converse endocrine disrupting properties according to ticle 57(f) or Commission Delegated regulation (2100 or Commission Regulation (EU) 2018/609 1% or higher.	
Vash Buffer I (d-W	/B I m/I)		
Endocrine disrupt	ing properties		
Product:			
Assessment	ered to hav REACH Ar (EU) 2017/	nce/mixture does not contain components con- ve endocrine disrupting properties according to ticle 57(f) or Commission Delegated regulation 2100 or Commission Regulation (EU) 2018/60 1% or higher.	
Further information	on		
Product:			
Remarks	: Solvents m	ay degrease the skin.	
Vash Buffer II (WE	3 II)		
Endocrine disrupt	ing properties		
Product:			
Assessment	ered to hav REACH Ar (EU) 2017/	nce/mixture does not contain components con- ve endocrine disrupting properties according to ticle 57(f) or Commission Delegated regulation 2100 or Commission Regulation (EU) 2018/60 1% or higher.	
Further information	on		
Product:			
Remarks	: Solvents m	ay degrease the skin.	
Vash Buffer III			
Endocrine disrupt	ing properties		
Product:			
Assessment	ered to hav REACH Ar (EU) 2017/	nce/mixture does not contain components con- ve endocrine disrupting properties according to ticle 57(f) or Commission Delegated regulation 2100 or Commission Regulation (EU) 2018/60 1% or higher.	



Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

### 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.

# Proteinase K

### 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.

### Magnetic Glass Particles Suspension

### 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.

### **Further information**

### Product:

Remarks

 Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
 Concentrations substantially above the TLV value may cause narcotic effects.
 Solvents may degrease the skin.

# Elution 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.



Version	Revision Date:
6.0	30.01.2022

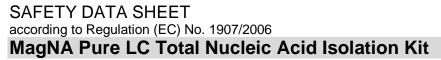
Date of last issue: 13.08.2021 Date of first issue: 29.10.2012

### **SECTION 12: Ecological information**

# 12.1 Toxicity Wash Buffer I (d-WB I m/I)

# Components:

guanidinium chloride:		
Toxicity to fish	:	LC50 (Leuciscus idus (Golden orfe)): 1.758 mg/l End point: mortality Exposure time: 48 h Test Type: static test GLP: yes
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 70,2 mg/l End point: Immobilization Exposure time: 48 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 202 GLP: No information available.
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 33,5 mg/l End point: Growth rate Exposure time: 72 h Test Type: static test Analytical monitoring: yes Method: Regulation (EC) No. 440/2008, Annex, C.3 GLP: yes
		EC50 (Pseudokirchneriella subcapitata (green algae)): 11,8 mg/l Exposure time: 72 h Test Type: static test Analytical monitoring: yes Method: Regulation (EC) No. 440/2008, Annex, C.3 GLP: yes
		NOEC (Pseudokirchneriella subcapitata (green algae)): 6,3 mg/l End point: Growth rate Exposure time: 72 h Test Type: static test Analytical monitoring: yes Method: Regulation (EC) No. 440/2008, Annex, C.3 GLP: yes
Toxicity to microorganisms	:	EC10 (Pseudomonas putida): 7.125 mg/l End point: Growth rate Exposure time: 18 h Test Type: static test Method: DIN 38 412 Part 8 GLP: yes





Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

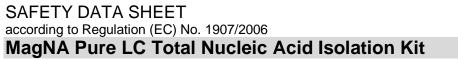
Toxicity to fish (Chronic tox- icity)	:	NOEC: > 181 mg/l End point: mortality Exposure time: 35 d Species: Pimephales promelas (fathead minnow) Test Type: flow-through test Analytical monitoring: yes Method: OECD Test Guideline 210 GLP: No information available.
Toxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity)	:	NOEC: 2,9 mg/l End point: reproduction rate Exposure time: 21 d Species: Daphnia magna (Water flea) Analytical monitoring: yes Method: OECD Test Guideline 211 GLP: No information available.
Ecotoxicology Assessment		
Acute aquatic toxicity	:	This product has no known ecotoxicological effects.
Chronic aquatic toxicity	:	This product has no known ecotoxicological effects.
Toxicity Data on Soil	:	Not expected to adsorb on soil.
Other organisms relevant to the environment	:	No data available
ethanol:		
Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): 15.300 mg/l End point: mortality Exposure time: 96 h
		Test Type: flow-through test Analytical monitoring: yes GLP: No information available.
Toxicity to daphnia and other aquatic invertebrates	:	Analytical monitoring: yes
	:	Analytical monitoring: yes GLP: No information available. LC50 (Ceriodaphnia dubia (water flea)): 5.012 mg/l Exposure time: 48 h Test Type: static test



Version 6.0	Revisior 30.01.20		Date of last issue: 13.08.2021 Date of first issue: 29.10.2012
		Remarks: Bas	sed on data from similar materials
Toxicity to fish icity)	(Chronic tox- :	Exposure time Species: Dan	
Toxicity to dapl aquatic invertel ic toxicity)	nnia and other : brates (Chron-	Exposure time	
Ecotoxicology Toxicity Data o		Not expected	to adsorb on soil.
Other organism the environmer		No data availa	able
Wash Buffer II (	WB II)		
Components:			
ethanol:			
Toxicity to fish	:	End point: mo Exposure time Test Type: flo Analytical mo	e: 96 h w-through test

Toxicity to daphnia and other aquatic invertebrates	:	LC50 (Ceriodaphnia dubia (water flea)): 5.012 mg/l Exposure time: 48 h Test Type: static test GLP: No information available.
Toxicity to algae/aquatic plants	:	EC50 (Chlorella vulgaris (Fresh water algae)): 275 mg/l Exposure time: 5 d Analytical monitoring: no Method: OECD Test Guideline 201 GLP: No information available.
Toxicity to microorganisms	:	IC50 (activated sludge): > 1.000 mg/l End point: Growth rate Exposure time: 3 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 209 GLP: No information available. Remarks: Based on data from similar materials
Toxicity to fish (Chronic tox-	:	NOEC: 250 mg/l

NOEC: 250 mg/l
Exposure time: 120 h
Species: Danio rerio (zebra fish)
GLP: No information available.





VersionRevision Date:Date of last issue: 13.08.20216.030.01.2022Date of first issue: 29.10.2012				
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Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 9,6 mg/l Exposure time: 7 d GLP: No information available.
Ecotoxicology Assessment Toxicity Data on Soil	:	Not expected to adsorb on soil.
Other organisms relevant to the environment	:	No data available
Wash Buffer III		
No data available Lysis/Binding Buffer		
Components:		
guanidinium thiocyanate:		
Toxicity to fish	:	LC50 (Poecilia reticulata (guppy)): 89,1 mg/l End point: mortality Exposure time: 96 h Test Type: static test Analytical monitoring: no Method: OECD Test Guideline 203 GLP: no
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia (water flea)): 42,4 mg/l End point: Immobilization Exposure time: 48 h Test Type: static test Analytical monitoring: no Method: OECD Test Guideline 202 GLP: no
Toxicity to algae/aquatic plants	:	EC50 (Desmodesmus subspicatus (green algae)): 130 mg/l End point: Growth rate Exposure time: 72 h Test Type: static test GLP: No information available.
Toxicity to microorganisms	:	EC50 (activated sludge): > 185 mg/l Exposure time: 28 d Test Type: static test Method: OECD Test Guideline 302B GLP: yes
Ecotoxicology Assessment		
Chronic aquatic toxicity	:	Harmful to aquatic life with long lasting effects.
Toxicity Data on Soil	:	Not expected to adsorb on soil.
Other organisms relevant to the environment	:	No data available



Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

### 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 Chronic aquatic toxicity	:	Toxic to aquatic life with long lasting effects.
Toxicity Data on Soil	:	Not expected to adsorb on soil.
Other organisms relevant to the environment	:	No data available

# Proteinase K

### **Components:**

### Proteinase, Tritirachium album serine:

Ecotoxicology Assessment		
Toxicity Data on Soil	:	Not expected to adsorb on soil.
Other organisms relevant to	:	No data available

the environment

# Magnetic Glass Particles Suspension

### **Components:**

<b>propan-2-ol:</b> Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): 10.000 mg/l End point: mortality Exposure time: 96 h Test Type: flow-through test Analytical monitoring: yes Method: OECD Test Guideline 203 GLP: no
Toxicity to daphnia and other aquatic invertebrates	:	LC50 (Daphnia magna (Water flea)): > 10.000 mg/l End point: Immobilization Exposure time: 24 h Test Type: static test Analytical monitoring: no Method: OECD Test Guideline 202 GLP: no
Toxicity to algae/aquatic plants	:	EC10 (Scenedesmus quadricauda (Green algae)): 1.800 mg/l Exposure time: 7 d Test Type: static test Analytical monitoring: no GLP: no



Version 6.0	Revision Date: 30.01.2022	Date of last issue: 13.08.2021 Date of first issue: 29.10.2012

Toxicity to microorganisms	:	(Pseudomonas putida): 1.050 mg/l Exposure time: 16 h Test Type: static test Analytical monitoring: no Method: DIN 38 412 Part 8 GLP: no
Ecotoxicology Assessment		
Toxicity Data on Soil	:	Not expected to adsorb on soil.
Other organisms relevant to the environment	:	No data available

# **Elution Buffer**

No data available

# 12.2 Persistence and degradability Wash Buffer I (d-WB I m/l)

Components:	
guanidinium chloride:	
Biodegradability	<ul> <li>Test Type: aerobic Inoculum: activated sludge, adapted Concentration: 10 mg/l Result: Not readily biodegradable. Biodegradation: 0 % Exposure time: 33 d Method: OECD Test Guideline 301C GLP: yes</li> </ul>
Impact on Sewage Treat- ment	: Do not discharge product into the aquatic environment without pretreatment (biological treatment plant).
ethanol:	
Biodegradability	<ul> <li>Test Type: aerobic Inoculum: activated sludge, non-adapted Result: Readily biodegradable. Biodegradation: 84 % Exposure time: 20 d GLP: No information available.</li> </ul>
ash Buffer II (WB II)	
Components:	
ethanol:	
Biodegradability	<ul> <li>Test Type: aerobic</li> <li>Inoculum: activated sludge, non-adapted</li> <li>Result: Readily biodegradable.</li> <li>Biodegradation: 84 %</li> </ul>

Exposure time: 20 d



13.08.2021 29.10.2012

Version	Revision Date:	Date of last issue:
6.0	30.01.2022	Date of first issue: 2

GLP: No information available.

# Wash Buffer III

No data available Lysis/Binding Buffer

### Components:

guanidinium thiocyanate:		
Biodegradability	:	Test Type: aerobic Inoculum: activated sludge, non-adapted Concentration: 343 mg/l Result: Inherently biodegradable. Biodegradation: 46 % Exposure time: 28 d Method: OECD Test Guideline 302B GLP: no

### 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.

# Proteinase K

No data available Magnetic Glass Particles Suspension

### **Components:**

propan-2-ol:	
Biodegradability	: Test Type: aerobic Inoculum: activated sludge Result: Readily biodegradable. Biodegradation: 53 % Exposure time: 5 d GLP: no

# **Elution Buffer**

No data available

12.3 Bioaccumulative potential Wash Buffer I (d-WB I m/l)

### **Components:**

guanidinium chloride:		
Partition coefficient: n- octanol/water	:	log Pow: < -1,7 (20 °C) pH: 7,4 Method: OECD Test Guideline 107 GLP: yes



Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

ethanol:		
Bioaccumulation	:	Remarks: Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.
Partition coefficient: n- octanol/water	:	log Pow: -0,35 (24 °C) pH: 7,4 Method: OECD Test Guideline 107 GLP: No information available.
Wash Buffer II (WB II)		
Components:		
ethanol:		
Bioaccumulation	:	Remarks: Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.
Partition coefficient: n- octanol/water	:	log Pow: -0,35 (24 °C) pH: 7,4 Method: OECD Test Guideline 107 GLP: No information available.
Wash Buffer III		
No data available Lysis/Binding Buffer		
Components:		
guanidinium thiocyanate:		
Partition coefficient: n- octanol/water	:	log Pow: -1,11 (25 °C) pH: > 5,1 Method: Regulation (EC) No. 440/2008, Annex, A.8 GLP: no

### 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- octanol/water	:	Remarks: No data available

# Proteinase K

### Components:

### Proteinase, Tritirachium album serine:

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

# Magnetic Glass Particles Suspension

Version 6.0	Revision Date: 30.01.2022	Date of last issue: 13.08.2021 Date of first issue: 29.10.2012
Components:		
propan-2-ol:		
Bioaccumulation		Due to the distribution coefficient n-octanol/wa ion in organisms is not expected.
Partition coefficient: octanol/water	n- : log Pow: 0 GLP: no	,05 (25 °C)
Elution Buffer		
No data available		
12.4 Mobility in soil		
Wash Buffer I (d-W	′B I m/I)	
No data available Wash Buffer II (WB	s II)	
No data available <b>Wash Buffer III</b>		
No data available Lysis/Binding Buffe	er	
No data available <b>Proteinase K</b>		
No data available Magnetic Glass Pa	rticles Suspension	
No data available <i>Elution Buffer</i>		
No data available		
12.5 Results of PBT an Wash Buffer I (d-W		
Not relevant Wash Buffer II (WB	: II)	
Not relevant Wash Buffer III		
Not relevant Lysis/Binding Buff	er	
Not relevant <b>Proteinase K</b>		
Not relevant Magnetic Glass Pa	rticles Suspension	
Not relevant Elution Buffer		
Not relevant		

Roche



Version 6.0	Revision Date: 30.01.2022	Date of last issue: 13.08.2021 Date of first issue: 29.10.2012
12.6 Endocrine disrupting	properties	
Product:		
Assessment	have end ing to RE	stance/mixture contains components considered to ocrine disrupting properties for environment, accord- ACH Article 57(f), Commission Regulation (EU) or Commission Delegated Regulation (EU) 0.
Wash Buffer I (d-WB	l m/l)	
Product:		
Assessment	ered to h REACH A (EU) 201	tance/mixture does not contain components consid- ave endocrine disrupting properties according to Article 57(f) or Commission Delegated regulation 7/2100 or Commission Regulation (EU) 2018/605 at 0.1% or higher.
Wash Buffer II (WB II)	)	
Assessment	ered to h REACH A (EU) 201	tance/mixture does not contain components consid- ave endocrine disrupting properties according to Article 57(f) or Commission Delegated regulation 7/2100 or Commission Regulation (EU) 2018/605 at 0.1% or higher.
Wash Buffer III		
Assessment	ered to ha REACH A (EU) 201	tance/mixture does not contain components consid- ave endocrine disrupting properties according to Article 57(f) or Commission Delegated regulation 7/2100 or Commission Regulation (EU) 2018/605 at 0.1% or higher.
Lysis/Binding Buffer		
Assessment	have end ing to RE	stance/mixture contains components considered to ocrine disrupting properties for environment, accord- ACH Article 57(f), Commission Regulation (EU) or Commission Delegated Regulation (EU) 0.
Components:		
alpha-(4-(1,1,3,3-Tetra	amethylbutyl)pheny	l)-omega-hydroxypoly(oxy-1,2-ethanediyl):
Assessment		tance is considered to have endocrine disrupting s according to REACH Article 57(f) for the environ-
Proteinase K		
Product:		
Assessment		tance/mixture does not contain components consid- ave endocrine disrupting properties according to

according to Regulation (EC) No. 1907/2006				
MagNA Pure LC To	otal Nucleic Aci	d Isolation Kit		
Version 6.0	Revision Date: 30.01.2022	Date of last issue: 13.08.2021 Date of first issue: 29.10.2012		
Magnotic Class Parti	(EU) 2017/ levels of 0.	ticle 57(f) or Commission Delegated regulation 2100 or Commission Regulation (EU) 2018/605 at 1% or higher.		
Magnetic Glass Partie	-			
Assessment	ered to hav REACH Ar (EU) 2017/	nce/mixture does not contain components consid- re endocrine disrupting properties according to ticle 57(f) or Commission Delegated regulation 2100 or Commission Regulation (EU) 2018/605 at 1% or higher.		
Elution Buffer				
Assessment	ered to hav REACH Ar (EU) 2017/	nce/mixture does not contain components consid- re endocrine disrupting properties according to ticle 57(f) or Commission Delegated regulation 2100 or Commission Regulation (EU) 2018/605 at 1% or higher.		
12.7 Other adverse effects Wash Buffer I (d-WB No data available Wash Buffer II (WB II)	l m/l)			

SAFETY DATA SHEET

No data available Wash Buffer III

No data available Lysis/Binding Buffer

No data available Proteinase K

No data available Magnetic Glass Particles Suspension

No data available

# **Elution Buffer**

No data available

# **SECTION 13: Disposal considerations**

### 13.1 Waste treatment methods

Product

The product contains a substance on REACH Annex XIV at : 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.



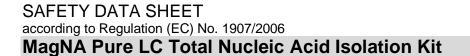
Version 6.0	Revision Date: 30.01.2022	Date of last issue: 13.08.2021 Date of first issue: 29.10.2012
	Send to a lic	ensed waste management company.
Contaminated package	Dispose of a	ining contents. Is unused product. Ie empty containers.

Do not burn, or use a cutting torch on, the empty drum.

# **SECTION 14: Transport information**

	14.1	UN	number	or ID	number
--	------	----	--------	-------	--------

	ADR	:	UN 3316
	RID	:	UN 3316
	IMDG	:	UN 3316
	ΙΑΤΑ	:	UN 3316
14.2	2 UN proper shipping name		
	ADR	:	CHEMICAL KIT
	RID	:	CHEMICAL KIT
	IMDG	:	CHEMICAL KIT
	ΙΑΤΑ	:	Chemical kit
14.3	B Transport hazard class(es)		
	ADR	:	9
	RID	:	9
	IMDG	:	9
	ΙΑΤΑ	:	9
14.4	Packing group		
	ADR		
	Packing group Classification Code	:	ll M11
	Labels	:	M11 9
	Tunnel restriction code	:	(E)
	RID		
	Packing group Classification Code	÷	II M11
	Hazard Identification Number	÷	90
	Labels	:	9
	IMDG		
	Packing group Labels	:	 9
	EmS Code	:	F-A, S-P
	IATA (Cargo)		
	Packing instruction (cargo aircraft)	:	960
	Packing instruction (LQ)	:	Y960



Revision Date:



Date of last issue: 13.08.2021

6.0	30.01.2022		22	Date of first issue: 29.10.2012
	Packing group Labels	:	ll Miscellaneous	
	IATA (Passenger) Packing instruction (passen- ger aircraft) Packing instruction (LQ) Packing group Labels	:	960 Y960 II Miscellaneous	
14.5	Environmental hazards			
	ADR Environmentally hazardous	:	no	
	<b>RID</b> Environmentally hazardous	:	no	
	IMDG Marine pollutant	:	no	

### 14.6 Special precautions for user

Remarks

Version

: No data available

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

### 14.7 Maritime transport in bulk according to IMO instruments

Remarks

: Not applicable

# **SECTION 15: Regulatory information**

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

REACH - Restrictions on the manufacture, placing on	:	Conditions of restriction for the fol-
the market and use of certain dangerous substances,		lowing entries should be considered:
preparations and articles (Annex XVII)		Number on list 3
the market and use of certain dangerous substances, preparations and articles (Annex XVII)		0

REACH - Candidate List of Substances of Very High : Not applicable Concern for Authorisation (Article 59).

**Revision Date:** 

Version



6.0	5011	30.01.202			
	Regulation (EC) No 10 plete the ozone layer	05/2009 or	n substances that de- : Not applicable		
	Regulation (EU) 2019/ tants (recast)	1021 on pe	ersistent 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 substa (Annex XIV)	ances subje	ect to authorisation : Not applicable		
	The components of t	his produc	t 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	:	On the inventory, or in compliance with the inventory		
	ISHL	:	On the inventory, or in compliance with the inventory		
	KECI	:	On the inventory, or 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		
	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) Volatile organic compounds (VOC) content: 28,4 %

Date of last issue: 13.08.2021

### Labelling (REGULATION (EC) No 1272/2008)

:

1

Hazard pictograms



Signal word

Warning



Version 6.0	Revisior 30.01.20		Date of last issue: 13.08.2021 Date of first issue: 29.10.2012
Hazard statement	s :	H226 H302 H315 H319	Flammable liquid and vapour. Harmful if swallowed. Causes skin irritation. Causes serious eye irritation.
Precautionary stat	tements :	Preve P210	ntion: Keep away from heat, hot surfaces, sparks, open
		P264 P280	and other ignition sources. No smoking.
		Respo	onse:
		ately a P337 - attentic P370 -	<ul> <li>+ P361 + P353 IF ON SKIN (or hair): Take off immed ill contaminated clothing. Rinse skin with water.</li> <li>+ P313 If eye irritation persists: Get medical advice/ on.</li> <li>+ P378 In case of fire: Use dry sand, dry chemical or il-resistant foam to extinguish.</li> </ul>

Hazardous components which must be listed on the label:

50-01-1 guanidinium chloride

# Wash Buffer II (WB II)

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)			Conditions of restriction for the fol- lowing entries should be considered: Number on list 3		
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).			Not applicable		
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer			Not applicable		
Regulation (EU) 2019/1021 on persistent organic pollutants (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)			Not applicable		
The components of this product 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					



Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

NZIoC	:	On the inventory, or in compliance with the inventory
ENCS	:	On the inventory, or in compliance with the inventory
ISHL	:	On the inventory, or in compliance with the inventory
KECI	:	On the inventory, or 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
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) Volatile organic compounds (VOC) content: 37,92 %

# Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :	
Signal word :	Warning
Hazard statements :	<ul><li>H226 Flammable liquid and vapour.</li><li>H319 Causes serious eye irritation.</li></ul>
Precautionary statements :	<ul> <li>Prevention:</li> <li>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</li> <li>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.</li> </ul>
	Response:P303 + P361 + P353IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.P337 + P313If eye irritation persists: Get medical advice/ attention.P370 + P378In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
	<b>Storage:</b> P403 + P235 Store in a well-ventilated place. Keep cool.
	P403 + P235 Store in a well-ventilated place. Keep cool.



Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

# Wash Buffer III

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 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)	:	Not applicable

The components of this product 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	:	On the inventory, or in compliance with the inventory		
ISHL	:	On the inventory, or in compliance with the inventory		
KECI	:	On the inventory, or 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		
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		

SAFETY DATA	A SHEET lation (EC) No. 1907/2006			Roche
	LC Total Nucleic Acid	Isolatio	n Kit	
Version 6.0	Revision Date: 30.01.2022		f last issue: 13.08.20 f first issue: 29.10.20	
	EGULATION (EC) No 1272/2008) bus substance or mixture.			
Lysis/Bind	ling Buffer			
the market an	strictions on the manufacture, placi ad use of certain dangerous substa and articles (Annex XVII)	•	Conditions of restr lowing entries sho Number on list 3	
	ndidate List of Substances of Very Authorisation (Article 59).	High :	alpha-(4-(1,1,3,3- Tetramethylbutyl)p hydroxypoly(oxy-1	
Regulation (E plete the ozor	C) No 1005/2009 on substances the layer	nat de- :	Not applicable	
Regulation (E tants (recast)	U) 2019/1021 on persistent organi	c pollu- :	Not applicable	
	C) No 649/2012 of the European F Council concerning the export and chemicals		Not applicable	
REACH - List (Annex XIV)	of substances subject to authorisa	ation :	alpha-(4-(1,1,3,3- Tetramethylbutyl)p hydroxypoly(oxy-1 For customers in th nomic Area:, Conta tyl/nonylphenol eth in research and un conditions only, # and 3.23 REACH I	,2-ethanediyl) he European Eco- ains SVHC:, oc- noxylates., For use inder controlled acc. to Art. 56.3

### Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

The components of this pro AIIC	odu :	ct are reported in the following inventories: 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	:	On the inventory, or in compliance with the inventory
ISHL	:	On the inventory, or in compliance with the inventory



Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

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
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)

Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	<ul><li>H302 Harmful if swallowed.</li><li>H314 Causes severe skin burns and eye damage.</li><li>H412 Harmful to aquatic life with long lasting effects.</li></ul>
Supplemental Hazard Statements	:	EUH032 Contact with acids liberates very toxic gas.
		EUH071 Corrosive to the respiratory tract.
Precautionary statements	:	Prevention:
		<ul><li>P273 Avoid release to the environment.</li><li>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.</li></ul>
		Response:
		P301 + P330 + P331IF SWALLOWED: Rinse mouth. DoNOT induce vomiting.P303 + P361 + P353IF ON SKIN (or hair): Take off immedi-
		F303 + F301 + F333 IF ON SKIN (01 Hall). Take 01 IIIIIIeur
		ately all contaminated clothing. Rinse skin with water.



# VersionRevision Date:Date of last issue: 13.08.20216.030.01.2022Date of first issue: 29.10.2012

	POISON CENTER/ doctor.	
Hazardous compon	ents which must be listed on the label:	
593-84-0	guanidinium thiocyanate	
9002-93-1	alpha-(4-(1,1,3,3-Tetramethylbutyl)phenyl)-omega- hydroxypoly(oxy-1,2-ethanediyl)	

# Proteinase K

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 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)	:	Not applicable

# Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

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.
		Proteinase, Tritirachium album serine
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



Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

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	:	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)

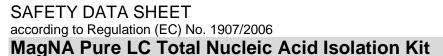
Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	<ul> <li>H315 Causes skin irritation.</li> <li>H317 May cause an allergic skin reaction.</li> <li>H319 Causes serious eye irritation.</li> <li>H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.</li> <li>H335 May cause respiratory irritation.</li> </ul>
Precautionary statements	:	Prevention:P261Avoid breathing dust.P264Wash skin thoroughly after handling.P280Wear protective gloves/ eye protection/ face protection.P284Wear respiratory protection.
		Response: P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.

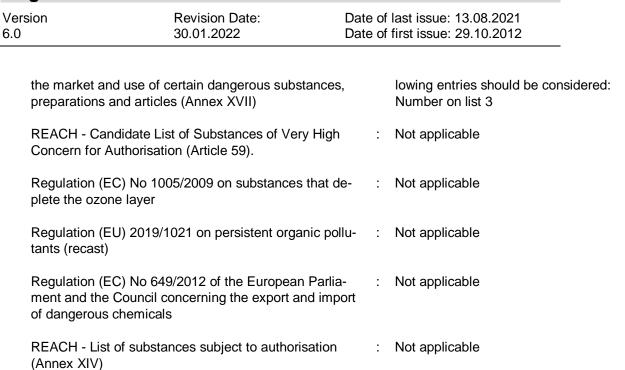
Hazardous components which must be listed on the label:

39450-01-6 Proteinase, Tritirachium album serine

# Magnetic Glass Particles Suspension

REACH - Restrictions on the manufacture, placing on : Conditions of restriction for the fol-





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### Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

The components of this pro	duo	ct are reported in the following inventories: Not in compliance with the inventory
Alle	•	
DSL	:	This product contains the following components that are not on the Canadian DSL nor NDSL.
		Magnetic glass particles (MGP)
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	:	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



Version	Revision Date:	Date of last issue: 13.08.2021
6.0	30.01.2022	Date of first issue: 29.10.2012

emissions (integrated pollution prevention and control) Not applicable

# Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	<ul><li>H225 Highly flammable liquid and vapour.</li><li>H319 Causes serious eye irritation.</li><li>H336 May cause drowsiness or dizziness.</li></ul>
Precautionary statements	:	Prevention:P210Keep away from heat, hot surfaces, sparks, openflames and other ignition sources. No smoking.P233Keep container tightly closed.P261Avoid breathing mist or vapours.P280Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.
		Response:
		<ul> <li>P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.</li> <li>P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.</li> </ul>

Hazardous components which must be listed on the label:

67-63-0 propan-2-ol

# **Elution 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 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	:	Not applicable

ersion 0	Revision 30.01.20		Date of last issue: 13.08.2021 Date of first issue: 29.10.2012
of dangerous chen	nicals		
REACH - List of su (Annex XIV)	ıbstances subj	ect to authorisatio	n : Not applicable
The components	of this produ	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	:	On the inventory	, or in compliance with the inventory
ISHL	:	On the inventory	, or in compliance with the inventory
KECI	:	On the inventory	, or 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	r, or in compliance with the inventory
TSCA	:	All substances li	sted as active on the TSCA inventory
TECI	:	Not in compliand	e with the inventory
Volatile organic co	mpounds :		5/EU of 24 November 2010 on industrial rated pollution prevention and control)

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### Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

### 15.2 Chemical safety assessment

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

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

### **SECTION 16: Other information**

### **Full text of H-Statements**

H225 :	Highly flammable liquid and vapour.	
H302 :	Harmful if swallowed.	
H312 :	Harmful in contact with skin.	
H314 :	Causes severe skin burns and eye damage.	
H315 :	Causes skin irritation.	
H317 :	May cause an allergic skin reaction.	
H318 :	Causes serious eye damage.	
H319 :	Causes serious eye irritation.	

according to Regulation (EC) No. 1907/2006			
MagNA Pure LC	Total Nucleic Aci	d Isolation Kit	
Version 6.0	Revision Date: 30.01.2022	Date of last issue: 13.08.2021 Date of first issue: 29.10.2012	
H332	: Harmful if i	nhaled.	
H334		: May cause allergy or asthma symptoms or breathing difficul- ties if inhaled.	
H335	: May cause	: May cause respiratory irritation.	
H336	: May cause drowsiness or dizziness.		
H411		: Toxic to aquatic life with long lasting effects.	
H412	: Harmful to	aquatic life with long lasting effects.	
Full text of other a	bbreviations		
Acute Tox.	: Acute toxicity		
Aquatic Chronic	: Long-term (chronic) aquatic hazard		
Eye Dam.	: Serious eye damage		
Eye Irrit.	: Eye irritation		
Flam. Liq.	: Flammable liquids		
Resp. Sens.	: Respiratory sensitisation		
Skin Corr.	: Skin corrosion		
Skin Irrit.		: Skin irritation	
Skin Sens.	: Skin sensit	: Skin sensitisation	
STOT SE	: Specific target organ toxicity - single exposure		

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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

### **Further information**

SAFETY DATA SHEET



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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