

Safety Data Sheet

Precision nanoScript™2 Reverse Transcription and Precision Reverse Transcription Premix Kit
SDS

Date of Issue 11th Jul 2024

Version: 2

Product Components:

1. Oligo-dT Primers
2. dNTP Mix
3. Random Nonamer Primers
4. nanoScript 2 Enzyme
5. nanoScript 2 4X Reaction Buffer
6. RNase/DNase Free Water

Precision Reverse Transcription Premix Kit contains product components 1-7 in a combined mixture. The safety data information as below for the individual components applied to the combined mixture.

ISSUED TO MEET THE REQUIREMENTS OF REGULATION (EC) 1907/2006:
ARTICLE 31

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

Component Identifier: 1. Oligo-dT Primers		Name: Oligo-dT Primer Solution	
Product Use: Real-time PCR Test			
Manufacturer's Name: Primerdesign Limited			
Manufacturer's Address: York House, School Lane, Chandlers Ford, United Kingdom			
Postal Code: S053 4DG	Emergency Telephone: +44 (0) 800 0156 494		Fax: +44 (0) 8708 362 155
Hours of Operation: 09:00-17:30 UK time		Email: support@primerdesign.co.uk	

SECTION 2: Hazards Identification

2.1 Classifications

Classification of the substance or mixture: Not a hazardous substance or mixture.

Classification according to Regulation (EC) No 1272/2008: Not a hazardous substance or mixture.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC: Not a hazardous substance or mixture.

Information concerning particular hazards for human and environment: None

Other hazards that do not result in classification: None

2.2 Labelling

Labelling according to Regulation (EC) No 1272/2008: No

SECTION 3: Composition/Information on Ingredients

Components	CAS Number/EC Number	Weight
Synthetic Oligonucleotide	-	100 %

SECTION 4: First aid measures

EYE CONTACT: Wash eyes with large amounts of water or normal saline for at least 15 minutes. Observe for signs of irritation. If irritation is present, get medical attention.

SKIN CONTACT: Remove contaminated clothing. Flush affected area with water and then wash with soap or mild detergent and water. Observe for signs of irritation. If irritation is present, get medical attention.

INGESTION: Get medical attention.

INHALATION: Remove from exposure area to fresh air immediately. Get medical attention immediately.

Equipment to be available at the workplace for specific and immediate treatment: Eye-washing and skin washing facilities.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Dry chemical, foam, carbon dioxide or water. Care should be taken as to not aerosolize the powder, where it could become an inhalation risk.

5.2 Special hazards arising from the substance or mixture

None known to exist

5.3 Advice for firefighters

No special advice

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

None

6.2 Environmental precautions:

None

6.3 Methods and material for containment and cleaning up:

Wear appropriate protective clothing and chemically compatible gloves. Place spillage in appropriate container for waste disposal. Wash contaminated clothing before reuse.

SECTION 7: Handling and storage

7.1. Handling

Observe all federal, state and local regulations. Do not breathe dust. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Keep tightly closed.

7.2. Storage

Store at -20 °C. Use prudent laboratory practices for handling and storage of chemical substances of unknown toxicity.

SECTION 8: Exposure controls/personal protection

8.1. Exposure Limit Values

None

8.2. Exposure Controls

8.2.1. Occupational

Use in a laboratory hood or other ventilated device. OSHA, ACGIH, or NIOSH has not established occupational exposure limits for this substance. Use prudent laboratory practices for handling chemical substances of unknown toxicity.

EYE PROTECTION: Employees should wear splash proof or dust resistant safety goggles to prevent eye contact with this substance.

CLOTHING: Employees should wear appropriate protective clothing (laboratory coat with long sleeves) and equipment to prevent skin contact with this material.

GLOVES: Employee must wear appropriate protective gloves to prevent contact with this material.

SECTION 9: Physical and Chemical Properties

Appearance: Solid

pH: Not known

Odour: Odourless

Solubility: Not known

Density: Not known

Boiling point: Not known

Melting point: Not known

SECTION 10: Stability and Reactivity

10.1 Stability: Stable under recommended storage conditions.

10.2 Materials/Conditions to avoid: No data available

10.3 Incompatible Materials: No data available

10.4 Hazardous decomposition products: None

SECTION 11: Toxicological Information

11.1 Acute toxicity: No data available

11.2 Sensitisation —skin: No data available

11.3 Serious eye damage/irritation: no data available

SECTION 12: Ecological Information:

Toxicity: No data available

Persistence and degradability: No data available

Bio accumulative potential: No data available

Mobility in soil: No data available

Results of PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: No data available

SECTION 13: Disposal Considerations

Dispose of according to any local, national or regional regulations.

Product: Offer surplus and non-recyclable solutions to a licensed disposal company

Contaminated packaging: Dispose of as unused product

SECTION 14: Transport Information

UN Number: Not applicable

Proper shipping name: Not applicable

Class: Not applicable

Packing Group: Not applicable

SECTION 15: Regulatory information

Health, safety or environmental information is not required on the label (according to Regulation (EC) No 1272/2008)

SECTION 16: Other Information

16.1 Recommended restrictions on use: None

16.2. Sources of information used to compile this sheet Regulation (EC) No. 1907/2006 of the European Parliament and of the Council concerning the registration, evaluation, authorisation and restriction of chemicals (REACH): Article 31: Requirements for safety data sheets, and Annex II: Guide to the compilation of safety data sheets, OJL, 136, 29.5.2007, pp 35-36 and pp 84-89.

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, and amending Directive 67/548/EEC and Regulation (EC) No 1907/2006 (in short CLP).

Commission Decision 2000/532/EC establishing a list of wastes pursuant to Article 1 (a) of Directive 75/442/EEC on Waste and Article 1 (4) of Directive 91/689/EEC on Hazardous Waste. CONSLEG: 2000D0532-01/01/2002, Office for Official Publications of the European Communities.

Approved Supply List (8th edition), Information provided for the classification and labelling of substances and preparations for supply, United Kingdom Health and Safety Commission, 2005 (based on Annex I of 67/548/EEC).

Directive 98/79/EC of the European Parliament and of the Council on in vitro diagnostic medical devices, Annex II Essential Requirements, OJ L, 331, 7.12.98, p 20.

List of approved workplace exposure limits, Table 1 of EH40/2005, United Kingdom Health and Safety Commission, 2ND edition published 2011, implementing the European Commission's Indicative Occupational Exposure Limit Values Directive 2009/161/EU.

16.3. Changes from previous version

Second Version – Update to SDS template

The above information is based on data available and is believed to be correct. Since the information may be applied under conditions beyond our control and with which we may be unfamiliar, we do not assume any responsibility for the results of its use and all persons receiving it shall make their own determinations of the effects, properties and protections which pertain to their particular conditions.

No representation, warranty or guarantee, expressed or implied (including a warranty of fitness or merchantability for a particular purpose), is made with respect to the material, the accuracy of this information, the results to be obtained from the use thereof, or the hazards connected with the use of the material. Caution should be used in the handling and use of the material.

ISSUED TO MEET THE REQUIREMENTS OF REGULATION (EC) 1907/2006:
ARTICLE 31

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

Component Identifier: 2. dNTP Mix		Name: Deoxynucleoside triphosphates	
Product Use: Real-time PCR Test			
Manufacturer's Name: Primerdesign Limited			
Manufacturer's Address: York House, School Lane, Chandlers Ford, United Kingdom			
Postal Code: S053 4DG	Emergency Telephone: +44 (0) 800 0156 494		Fax: +44 (0) 8708 362 155
Hours of Operation: 09:00-17:30 UK time		Email: support@primerdesign.co.uk	

SECTION 2: Hazards Identification

2.1 Classifications

Classification of the substance or mixture: Not a hazardous substance or mixture.

Classification according to Regulation (EC) No 1272/2008: Not a hazardous substance or mixture.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC: Not a hazardous substance or mixture. Information concerning particular hazards for human and environment: None

Other hazards that do not result in classification: None

2.2 Labelling

Labelling according to Regulation (EC) No 1272/2008: None

SECTION 3: Composition/Information on Ingredients

Components	CAS Number/EC Number	Weight
Deoxynucleoside triphosphates	-	100 %

SECTION 4: First aid measures

EYE CONTACT: Wash eyes with large amounts of water or normal saline for at least 15 minutes. Observe for signs of irritation. If irritation is present, get medical attention.

SKIN CONTACT: Remove contaminated clothing. Flush affected area with water and then wash with soap or mild detergent and water. Observe for signs of irritation. If irritation is present, get medical attention.

INGESTION: Get medical attention,

INHALATION: Remove from exposure area to fresh air immediately. Get medical attention immediately.

Equipment to be available at the workplace for specific and immediate treatment: Eye-washing and skin washing facilities.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Dry chemical, foam, carbon dioxide or water. Care should be taken as to not aerosolize the powder, where it could become an inhalation risk.

5.2 Special hazards arising from the substance or mixture

None known to exist

5.3. Advice for firefighters

No special advice

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures None

6.2. Environmental precautions:

None

6.3. Methods and material for containment and cleaning up:

Wear appropriate protective clothing and chemically compatible gloves. Place spillage in appropriate container for waste disposal. Wash contaminated clothing before reuse.

SECTION 7: Handling and storage

7.1. Handling

Observe all federal, state and local regulations. Do not breathe dust. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Keep tightly closed.

7.2. Storage

Store at -20 °C. Use prudent laboratory practices for handling and storage of chemical substances of unknown toxicity.

SECTION 8: Exposure controls/personal Protection

8.1. Exposure Limit Values

None

8.2. Exposure Controls

8.2.1. Occupational

Use in a laboratory hood or other ventilated device. OSHA, ACGIH, or NIOSH has not established occupational exposure limits for this substance. Use prudent laboratory practices for handling chemical substances of unknown toxicity.

EYE PROTECTION: Employees should wear splash proof or dust resistant safety goggles to prevent eye contact with this substance.

CLOTHING: Employees should wear appropriate protective clothing (laboratory coat with long sleeves) and equipment to prevent skin contact with this material.

GLOVES: Employee must wear appropriate protective gloves to prevent contact with this material.

SECTION 9: Physical and Chemical Properties

Appearance: Solid

pH: Not known

Odour: Odourless

Solubility: Not known

Density: Not known

Boiling point: Not known

Melting point: Not known

SECTION 10: Stability and Reactivity

10.1. Stability:

Stable under recommended storage conditions.

10.2. Materials/Conditions to avoid:

No data available

10.3. Incompatible Materials:

No data available

10.4. Hazardous decomposition products:

None

SECTION 11: Toxicological Information

11.1. Acute toxicity: No data available

11.2. Sensitisation —skin: No data available

11.3. Serious eye damage/irritation: No data available

SECTION 12: Ecological Information:

Toxicity: No data available

Persistence and degradability: No data available

Bio accumulative potential: No data available

Mobility in soil: No data available

Results of PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: No data available

SECTION 13: Disposal Considerations

Dispose of according to any local, national or regional regulations.

Product: Offer surplus and non-recyclable solutions to a licensed disposal company

Contaminated packaging: Dispose of as unused product

SECTION 14: Transport Information

UN Number: Not applicable

Proper shipping name: Not applicable

Class: Not applicable

Packing Group: Not applicable

SECTION 15: Regulatory Information

Health, safety or environmental information is not required on the label (according to Regulation (EC) No 1272/2008)

SECTION 16: Other Information

16.1. Recommended restrictions on use: None

16.2. Sources of information used to compile this sheet Regulation (EC) No. 1907/2006 of the European Parliament and of the Council concerning the registration evaluation, authorisation and restriction of chemicals (REACH): Article 31: Requirements for safety data sheets, and Annex II: Guide to the compilation of safety data sheets, OJL 136, 29.52007, pp 35-36 and pp 84-89.

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16.3. Changes from previous version Second Version – Update to SDS template

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No representation, warranty or guarantee, expressed or implied (including a warranty of fitness or merchantability for a particular purpose), is made with respect to the material, the accuracy of this information, the results to be obtained from the use thereof, or the hazards connected with the use of the material. Caution should be used in the handling and use of the material.

ISSUED TO MEET THE REQUIREMENTS OF REGULATION (EC) 1907/2006:
ARTICLE 31

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

Component Identifier: 3. Random Nonamer Primers		Name: Random Nonamer Primer Solution	
Product Use: Real-time PCR Test			
Manufacturer's Name: Primerdesign Limited			
Manufacturer's Address: York House, School Lane, Chandlers Ford, United Kingdom			
Postal Code: S053 4DG		Emergency Telephone: +44 (0) 800 0156 494	Fax: +44 (0) 8708 362 155
Hours of Operation: 09:00-17:30 UK time		Email: support@primerdesign.co.uk	

SECTION 2: Hazards Identification

2.1 Classifications

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Classification according to Regulation (EC) No 1272/2008: Not a hazardous substance or mixture.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC: Not a hazardous substance or mixture.

Information concerning particular hazards for human and environment: None

Other hazards that do not result in classification: None

2.2 Labelling

Labelling according to Regulation (EC) No 1272/2008: None

SECTION 3: Composition/Information on Ingredients

Components	CAS Number/EC Number	Weight
Synthetic Oligonucleotide	-	100 %

SECTION 4: First aid measures

EYE CONTACT: Wash eyes with large amounts of water or normal saline for at least 15 minutes. Observe for signs of irritation. If irritation is present, get medical attention.

SKIN CONTACT: Remove contaminated clothing. Flush affected area with water and then wash with soap or mild detergent and water. Observe for signs of irritation. If irritation is present, get medical attention.

INGESTION: Get medical attention.

INHALATION: Remove from exposure area to fresh air immediately. Get medical attention immediately.

Equipment to be available at the workplace for specific and immediate treatment: Eye-washing and skin-washing facilities.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Dry chemical, foam, carbon dioxide or water. Care should be taken as to not aerosolize the powder, where it could become an inhalation risk.

5.2 Special hazards arising from the substance or mixture

None known to exist

5.3. Advice for firefighters

No special advice

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures None

6.2. Environmental precautions:
None

6.3. Methods and material for containment and cleaning up:

Absorb with liquid binding material.

Wear appropriate protective clothing and chemically compatible gloves. Place spillage in appropriate container for waste disposal. Wash contaminated clothing before reuse.

SECTION 7: Handling and storage

7.1. Handling

Observe all federal, state and local regulations. Do not breathe dust. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Keep tightly closed.

7.2. Storage

Store at -20 ° C. Use prudent laboratory practices for handling and storage of chemical substances of unknown toxicity.

SECTION 8: Exposure controls/personal protection

8.1. Exposure Limit Values
None

8.2. Exposure Controls

8.211. Occupational

Use in a laboratory hood or other ventilated device. OSHA, ACGIH, or NIOSH has not established occupational exposure limits for this substance. Use prudent laboratory practices for handling chemical substances of unknown toxicity.

EYE PROTECTION: Employees should wear splash proof or dust resistant safety goggles to prevent eye contact with this substance.

CLOTHING: Employees should wear appropriate protective clothing (laboratory coat with long sleeves) and equipment to prevent skin contact with this material.

GLOVES: Employee must wear appropriate protective gloves to prevent contact with this material.

SECTION 9: Physical and Chemical Properties

Appearance: Solid

pH: Not known

Odour: Odourless

Solubility: Not known

Density: Not known

Boiling Point: Not known

Melting point: Not known

SECTION 10: Stability and Reactivity

10.1. Stability: Stable under recommended storage conditions.

10.2. Materials/Conditions to avoid: No data available

10.3. Incompatible Materials: No data available

10.4. Hazardous decomposition products: None

SECTION 11: Toxicological Information

11.1. Acute toxicity: No data available

11.2. Sensitisation —skin: No data available

11.3 Serious eye damage/irritation: No data available

SECTION 12: Ecological Information:

Toxicity: Not harmful for the aquatic environment

Persistence and degradability: No data available

Bio accumulative potential: No data available

Mobility in soil: No data available

Results of PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: No data available

SECTION 13: Disposal Considerations

Dispose of according to any local, national or regional regulations.

Product: Offer surplus and non-recyclable solutions to a licensed disposal company

Contaminated packaging: Dispose of as unused product

SECTION 14: Transport Information

UN Number: Not applicable

Proper shipping name: Not applicable

Class: Not applicable

Packing Group: Not applicable

SECTION 15: Regulatory Information

Health, safety or environmental information is not required on the label (according to Regulation (EC) No 1272/2008)

SECTION 16: Other Information

16.1 Recommended restrictions on use: None

16.2 Sources of information used to compile this sheet Regulation (EC) No. 1907/2006 of the European Parliament and of the Council concerning the registration, evaluation, authorisation and restriction of chemicals (REACH): Article 31: Requirements for safety data sheets, and Annex II: Guide to the compilation of safety data sheets, OJL, 1 36, 29.52007, pp 35-36 and pp 84-89.

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16.3 Changes from previous version

Second Version – Update to SDS template

The above information is based on data available and is believed to be correct. Since the information may be applied under conditions beyond our control and with which we may be unfamiliar, we do not assume any responsibility for the results of its use and all persons receiving it shall make their own determinations of the effects, properties and protections which pertain to their particular conditions,

No representation, warranty or guarantee, expressed or implied (including a warranty of fitness or merchantability for a particular purpose), is made with respect to the material, the accuracy of this information, the results to be obtained from the use thereof, or the hazards connected with the use of the material. Caution should be used in the handling and use of the material.

ISSUED TO MEET THE REQUIREMENTS OF REGULATION (EC) 1907/2006:
ARTICLE 31

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

Component Identifier: 4. nanoScript 2 Enzyme		Name: Reverse transcriptase enzyme	
Product Use: Real-time PCR Test			
Manufacturer's Name: Primerdesign Limited			
Manufacturer's Address: York House, School Lane, Chandlers Ford, United Kingdom			
Postal Code: S053 4DG		Emergency Telephone: +44 (0) 800 0156 494	Fax: +44 (0) 8708 362 155
Hours of Operation: 09:00-17:30 UK time		Email: support@primerdesign.co.uk	

SECTION 2: Hazards Identification

2.1 Classifications

Classification of the substance or mixture: Not a hazardous substance or mixture.

Classification according to Regulation (EC) No 1272/2008: Not a hazardous substance or mixture.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC: Not a hazardous substance or mixture.

Information concerning particular hazards for human and environment: None

Other hazards that do not result in classification: None

2.2 Labelling

Labelling according to Regulation (EC) No 1272/2008: None

SECTION 3: Composition/Information on Ingredients

Components	CAS Number/EC Number	Weight
Glycerol	56-81-5/200-289-5	25-50%

SECTION 4: First aid measures

EYE CONTACT: Rinse opened eye for several minutes under running water

SKIN CONTACT: Generally, the product does not irritate the skin

INGESTION: If the patient feels unwell or is concerned, obtain medical advice.

INHALATION: If the patient feels unwell or is concerned, obtain medical advice.

Equipment to be available at the workplace for specific and immediate treatment: Eye-washing facilities.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture

None known to exist

5.3. Advice for firefighters

No special advice

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Not required.

6.2. Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

6.3. Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Wear appropriate protective clothing and chemically compatible gloves. Place spillage in appropriate container for waste disposal. Wash contaminated clothing before reuse.

SECTION 7: Handling and storage

7.1. Handling

No special measures required. Observe all federal, state and local regulations.

7.2. Storage

Store at -20°C. Use prudent laboratory practices for handling and storage of chemical substances of unknown toxicity.

SECTION 8: Exposure controls/personal Protection

8.1. Exposure Limit Values

56-81-5 - glycerol

WEL Long-term value: 10 mg/m³

8.2. Exposure Controls

8.11. Occupational

OSHA, ACGIH, or NIOSH has not established occupational exposure limits for this substance. Use prudent laboratory practices for handling chemical substances of unknown toxicity.

EYE PROTECTION: Not required.

CLOTHING: Employees should wear appropriate protective clothing (laboratory coat with long sleeves).

GLOVES: Select the glove material considering penetration time, rate of diffusion and degradation time.

Material of gloves:

Gloves impermeable to the specific chemical substance.

Please observe the instructions regarding permeability and breakthrough time which are provided by the manufacturer/supplier of the gloves. Ensure gloves are suitable for the task which includes, but is not limited to, chemical compatibility, dexterity, operational conditions, user susceptibility, e.g., sensitization effects. Consider specific local conditions under which the product is used such as the danger of cuts and abrasion. Remove gloves with care to avoid skin contamination.

The selection of suitable gloves depends not only on the material, but also on additional quality marks and varies from manufacturer to manufacturer. Because the product is a preparation for some substances, the resistance of the glove material cannot be calculated in advance so it must be checked before application.

SECTION 9: Physical and chemical properties

Appearance:

Form:	Fluid
Colour:	Colourless
Odour:	Not determined
Odour threshold:	Not determined

pH-value at 20 °C:	7.4
Melting point/freezing point:	Undetermined
Initial boiling point and boiling range:	100 °C
Flash point:	160 °C
Flammability (solid, gaseous)	Not applicable
Ignition temperature:	400 °C
Decomposition temperature:	Not determined
Auto-ignition temperature:	Product is not self-igniting
Explosive properties:	Product does not present an explosion hazard
Explosion limits:	
Lower:	0.9 Vol %
Upper:	0.0 Vol %
Vapour pressure at 20 °C:	<0.1 hPa
Density at 20 °C:	1.154 g/cm ³
Relative density:	Not determined
Vapour density:	Not determined
Evaporation rate:	Not determined
Solubility in / Miscibility with Water:	Fully miscible
Partition coefficient: n-octanol/water:	Not determined
Viscosity:	
dynamic:	Not determined
kinematic:	Not determined
Solvent separation test	
Organic solvents:	50.0 %
Water:	48.3 %
Solids content:	1.5 %

9.2 Other information: No further relevant information available

SECTION 10: Stability and Reactivity

10.1 Stability: Stable under recommended storage conditions.

10.2 Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications

10.3 Materials/Conditions to avoid: No further relevant information available

10.4 Incompatible Materials: No further relevant information available

10.5 Hazardous decomposition products: No dangerous decomposition products known

SECTION 11: Toxicological Information

11.1 Acute toxicity:

Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:		
56-81-5 glycerol		
Oral	LD50	1,200 mg/kg (Rat)

11.2 Primary irritant effect:

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.

11.3 Additional toxicological information:

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure: Based on available data, the classification criteria are not met.

STOT-repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

SECTION 12: Ecological Information:

Toxicity: Not harmful for the aquatic environment

Persistence and degradability: No data available

Bio accumulative potential: No data available

Mobility in soil: No data available

Results of PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted Other adverse effects: No data available

SECTION 13: Disposal Considerations

Dispose of according to any local, national or regional regulations.

Product: Offer surplus and non-recyclable solutions to a licensed disposal company

Contaminated packaging: Disposal must be made according to official regulations.

SECTION 14: Transport Information

UN Number: Not applicable

Proper shipping name: Not applicable

Class: Not applicable

Packing Group: Not applicable

SECTION 15: Regulatory Information

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

Classification according to VbF: Not applicable

Class	Share in %
Wasser	48.3
NK	50.0

Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other Information

16.1. Recommended restrictions on use: None

16.2. Sources of information used to compile this sheet Regulation (E C) No. 1907/2006 of the European Parliament and of the Council concerning the registration, evaluation, authorisation and restriction of chemicals (REACH): Article 31: Requirements for safety data sheets, and Annex II: Guide to the compilation of safety data sheets, OJL, 1 36, 29.5.2007, pp 35-36 and pp 84-89.

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Directive 98/79/EC of the European Parliament and of the Council on in vitro diagnostic medical devices, Annex I, 'Essential Requirements, OJ L | 331, 7.1298, p 20.

List of approved workplace exposure limits, Table 1 of EH40/2005, United Kingdom Health and Safety Commission, 2ND edition published 2011, implementing the European Commission's Indicative Occupational Exposure Limit Values Directive 2009/161/EU.

16.3. Changes from previous version

Second Version – Update to SDS template

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No representation, warranty or guarantee, expressed or implied (including a warranty of fitness or merchantability for a particular purpose), is made with respect to the material the accuracy of this information, the results to be obtained from the use thereof, or the hazards connected with the use of the material. Caution should be used in the handling and use of the material.

ISSUED TO MEET THE REQUIREMENTS OF REGULATION (EC) 1907/2006:
ARTICLE 31

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

Component Identifier: 5. nanoScript 2 4X Reaction Buffer		Name: nanoScript 2 Reaction Buffer	
Product Use: Real-time PCR Test			
Manufacturer's Name: Primerdesign Limited			
Manufacturer's Address: York House, School Lane, Chandlers Ford, United Kingdom			
Postal Code: S053 4DG	Emergency Telephone: +44 (0) 800 0156 494		Fax: +44 (0) 8708 362 155
Hours of Operation: 09:00-17:30 UK time		Email: support@primerdesign.co.uk	

SECTION 2: Hazards Identification

2.1 Classifications

Classification of the substance or mixture: Not a hazardous substance or mixture.

Classification according to Regulation (EC) No 1272/2008: Not a hazardous substance or mixture.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC: Not a hazardous substance or mixture.

Information concerning particular hazards for human and environment: None

Other hazards that do not result in classification: None

2.2. Labelling

Labelling according to Regulation (EC) No 1272/2008: None

SECTION 3: Composition/Information on Ingredients

Components	CAS Number/EC Number	Weight
Tris HCl	1185-53-1/214-684-5	1-5%

SECTION 4: First aid measures

EYE CONTACT: Rinse opened eye for several minutes under running water.

SKIN CONTACT: Generally, the product does not irritate the skin.

INGESTION: If the patient feels unwell or is concerned, obtain medical advice.

INHALATION: If the patient feels unwell or is concerned, obtain medical advice.

Equipment to be available at the workplace for specific and immediate treatment: Eye-washing facilities.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture

None known to exist

5.3. Advice for firefighters

No special advice

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove persons from danger area. Wear protective clothing.

6.2 Environmental precautions:

Dilute with plenty of water. Do Not allow to enter sewers/surface or ground water.

6.3. Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Wear appropriate protective clothing and chemically compatible gloves. Place spillage in appropriate container for waste disposal. Wash contaminated clothing before reuse.

SECTION 7: Handling and storage

7.1. Handling

No special measures required. Observe all federal, state and local regulations.

7.2. Storage

Store at -20°C. Use prudent laboratory practices for handling and storage of chemical substances of unknown toxicity.

SECTION 8: Exposure controls/personal Protection

8.1. Exposure Limit Values

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2. Exposure Controls

8.2.1. Occupational

Wash hands before breaks and at the end of work. OSHA, ACGIH, or NIOSH has not established occupational exposure limits for this substance. Use prudent laboratory practices for handling chemical substances of unknown toxicity.

EYE PROTECTION: Use equipment for eye protection tested and approved under government standard EN 166(EU) or AS/NZS 1336, 1137 and 1138.

CLOTHING: Employees should wear appropriate protective clothing (laboratory coat with long sleeves).

GLOVES: Select the glove material considering penetration time, rate of diffusion and degradation time. Use gloves, classified under Standard EN374, which are chemically resistant to this material in the event of contact. When prolonged or repeated contact may occur, EN 374 recommends gloves with a break time of more than 240 minutes. When only a short contact is expected, gloves with a break time of more than 60 minutes are considered sufficient.

Despite the simple approach in Section 8.2.2.2 (b) (i) of UK REACH, the thickness of the gloves alone is not a good indicator of the level of protection provided by gloves against a chemical substance as the level of protection provided depends also very much on the specific composition of the material from which the glove is made.

Material of gloves:

Gloves impermeable to the specific chemical substance.

Please observe the instructions regarding permeability and breakthrough time which are provided by the manufacturer/supplier of the gloves. Ensure gloves are suitable for the task which includes, but is not limited to, chemical compatibility, dexterity, operational conditions, user susceptibility, e.g., sensitization

effects. Consider specific local conditions under which the product is used such as the danger of cuts and abrasion. Remove gloves with care to avoid skin contamination.

The selection of suitable gloves depends not only on the material, but also on additional quality marks and varies from manufacturer to manufacturer. Because the product is a preparation for some substances, the resistance of the glove material cannot be calculated in advance so it must be checked before application.

SECTION 9: Physical and chemical properties

Appearance:

Form:	Fluid
Colour:	Colourless
Odour:	Not determined
Odour threshold:	Not determined
pH-value at 20 °C:	8.3
Melting point/freezing point:	Undetermined
Initial boiling point and boiling range:	100 °C
Flash point:	Not applicable
Flammability (solid, gaseous)	Not applicable
Decomposition temperature:	Not determined
Auto-ignition temperature:	Product is not self-igniting
Explosive properties:	Product does not present an explosion hazard
Explosion limits:	
Lower:	Not determined
Upper:	Not determined
Vapour pressure at 20 °C:	Not determined
Density at 20 °C:	1.029 g/cm ³
Relative density:	Not determined
Vapour density:	Not determined
Evaporation rate:	Not determined
Solubility in / Miscibility with Water:	Fully miscible
Partition coefficient: n-octanol/water:	Not determined
Viscosity:	
dynamic:	Not determined
kinematic:	Not determined
Solvent separation test	
Water:	92.5 %
Solids content:	7.5 %

9.2 Other information: No further relevant information available

SECTION 10: Stability and Reactivity

10.1 Stability: Stable under recommended storage conditions.

10.2 Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications

10.3 Materials/Conditions to avoid: No further relevant information available

10.4 Incompatible Materials: No further relevant information available

10.5 Hazardous decomposition products: No dangerous decomposition products known

SECTION 11: Toxicological Information

11.1 Acute toxicity:

Based on available data, the classification criteria are not met.

11.2 Primary irritant effect:

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.

11.3 Additional toxicological information:

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure: Based on available data, the classification criteria are not met.

STOT-repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

SECTION 12: Ecological Information:

Toxicity: Not harmful for the aquatic environment

Persistence and degradability: No data available

Bio accumulative potential: No data available

Mobility in soil: No data available

Results of PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: No data available

SECTION 13: Disposal Considerations

Dispose of according to any local, national or regional regulations.

Product: Offer surplus and non-recyclable solutions to a licensed disposal company

Contaminated packaging: Disposal must be made according to official regulations.

SECTION 14: Transport Information

UN Number: Not applicable

Proper shipping name: Not applicable

Class: Not applicable

Packing Group: Not applicable

SECTION 15: Regulatory Information

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

Classification according to VbF: Not applicable

Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other Information

16.1. Recommended restrictions on use: None

16.2. Sources of information used to compile this sheet

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council concerning the registration, evaluation, authorisation and restriction of chemicals (REACH): Article 31: Requirements for safety data sheets, and Annex II: Guide to the compilation of safety data sheets, OJL, 1 361 29.52007, pp 35-36 and pp 84-89.

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ISSUED TO MEET THE REQUIREMENTS OF REGULATION (EC) 1907/2006: Article 31

SECTION 1: Identification of the substance and of the Company/undertaking

Component Identifier: 6. RNase/DNase Free Water		Name: RNase/DNase free water	
Product Use: Real-time PCR test			
Manufacturer's Name: Primerdesign Limited			
Manufacturer's Address: York House, School Lane, Chandlers Ford, United Kingdom			
Postal Code: S053 4DG		Emergency Telephone: +44 (0) 800 0156 494	Fax: +44 (0) 8708 362 155
Hours of Operation: 09:00 – 17:30 UK time		Email: support@primerdesign.co.uk	

SECTION 2: Hazards Identification

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Classification according to Directive 67/548/EEC or Directive 1999/45/EC: Not a hazardous substance or mixture.

Information concerning particular hazards for human and environment: None

Other hazards that do not result in classification: None

2.2 Labelling

Labelling according to Regulation (EC) No 1272/2008: None

SECTION 3: Composition/Information on Ingredients

Components	CAS Number/EC Number	Weight
RNase/DNase free water	7732-18-5/231-791-2	100%

SECTION 4: First aid measures

EYE CONTACT: No hazards which require special first aid measures

SKIN CONTACT: No hazards which require special first aid measures

INGESTION: No hazards which require special first aid measures

INHALATION: No hazards which require special first aid measures

Equipment to be available at the workplace for specific and immediate treatment: Eye-washing and skin-washing facilities.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Substance is non-flammable; use agent most appropriate to extinguish surrounding fire.

5.2 Special hazards arising from the substance or mixture

None known to exist

5.3. Advice for firefighters

No special advice

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures:

If spilled, take caution, as material can cause surfaces to become very slippery.

6.2. Environmental precautions:

None

6.3. Methods and material for containment and cleaning up:

Soak up with inert absorbent material

SECTION 7: Handling and storage

7.1. Handling

No special handling advice required

7.2. Storage

No special storage conditions required

SECTION 8: Exposure controls/personal Protection

8.1. Exposure Limit Values

None

8.2. Exposure Controls

8.2.1. Occupational

EYE PROTECTION: No special protective equipment required

HAND PROTECTION: No special protective equipment required

SKIN & BODY PROTECTION: No special protective equipment required

GLOVES: Employee must wear appropriate protective gloves

SECTION 9: Physical and chemical properties

Appearance: Clear Liquid

pH: 7.0

Molecular weight: 18.051

Odour: Odourless

Density: 1.0 g/cm at 20°C

% Volatiles by volume: 0.0

Boiling Point: 100.0°C

Melting Point: 0.0°C

Vapour Pressure: 23 hPa at 20°C

SECTION 10: Stability and Reactivity

10.1. Stability:

Stable under recommended storage conditions.

10.2. Materials/Conditions to avoid:

Incompatible products. Excess heat

10.3. Incompatible Materials:

No data available

10.4. Hazardous decomposition products:

None

SECTION 11: Toxicological Information

11.1. Acute toxicity: No data available

11.2. Sensitisation skin: No data available

11.3. Serious Eye damage/irritation: No data available

SECTION 12: Ecological Information:

Toxicity: No data available

Persistence and degradability: No data available

Bio accumulative potential: No data available

Mobility in soil: No data available

Results of PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: No data available

SECTION 13: Disposal Considerations

Dispose of according to any local, national or regional regulations.

Product: Offer surplus and non-recyclable solutions to a licensed disposal company

Contaminated packaging: Dispose of as unused product

SECTION 14: Transport Information

UN Number: Not applicable

Proper shipping name: Not applicable

Class: Not applicable

Packing Group: Not applicable

SECTION 15: Regulatory Information

Health, safety or environmental information is not required on the label (according to Regulation (EC) No 1272/2008)

SECTION 16: Other Information

16.1. Recommended restrictions on use: None

16.2. Sources of information used to compile this sheet

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