Safety Data Sheet



Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name

Custom Protoscript II 10X Reaction Primer Mix

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified use(s)

· This product is for research and development only

1.3 Details of the supplier of the safety data sheet

Manufacturer

NanoString Technologies

530 Fairview Avenue North Seattle, WA 98109 United States

www.nanostring.com

safetycommittee@nanostring.com

Telephone (General) • 206.378.NANO (6266)

1.4 Emergency telephone number

Manufacturer • 206.378.NANO (6266)

Section 2: Hazards Identification

EU/EEC

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 2015/830]

2.1 Classification of the substance or mixture

CLP

· Not classified

2.2 Label Elements

CLP

Hazard statements • No label element(s) required

2.3 Other Hazards

CLP

 According to Regulation (EC) No. 1272/2008 (CLP) this material is not considered hazardous.

UN GHS Revision 4

According to: UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS): Fourth Revised Edition

2.1 Classification of the substance or mixture

Preparation Date: 15/June/2017 Revision Date: 15/June/2017 UN GHS

Not classified

2.2 Label elements

UN GHS

Hazard statements • No label element(s) required

Precautionary statements

2.3 Other hazards

UN GHS

 According to the Globally Harmonized System for Classification and Labeling (GHS) this product is not considered hazardous

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS 2012

· Not classified

2.2 Label elements

OSHA HCS 2012

Hazard statements . No label element(s) required

2.3 Other hazards

OSHA HCS 2012

This product is not considered hazardous under the U.S. OSHA 29 CFR 1910.1200
 Hazard Communication Standard.

Canada

According to: WHMIS 2015

2.1 Classification of the substance or mixture

WHMIS 2015

· Not classified

2.2 Label elements

WHMIS 2015

Hazard statements • No label element(s) required

Precautionary statements

2.3 Other hazards

WHMIS 2015

 In Canada, the product mentioned above is not considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

Section 3 - Composition/Information on Ingredients

3.1 Substances

Material does not meet the criteria of a substance.

3.2 Mixtures

 The product contains no substances which at their given concentration, are considered to be hazardous to health.

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation • Remove to fresh air.

Skin
 Wash skin with soap and water.

Eye
 Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get

medicalattention.

Clean mouth with water and drink afterwards plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

· Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician

 All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media • In case of fire use media as appropriate for surrounding fire.

Unsuitable Extinguishing Media

· CAUTION: Use of water spray when fighting fire may be inefficient.

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion

Hazards

Some may burn but none ignite readily.

Hazardous Combustion

Products

No data available.

5.3 Advice for firefighters

Move containers from fire area if you can do it without risk. Wear positive pressure self-contained breathing apparatus (SCBA).

Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

Wear chemical protective clothing that is specifically recommended by the

manufacturer. It may provide little or no thermal protection.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions

• Ensure adequate ventilation, especially in confined areas. Do not walk through spilled material. Wear appropriate protective clothing.

Emergency Procedures

Keep unauthorized personnel away. Stay upwind.

6.2 Environmental precautions

Avoid run off to waterways and sewers.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures

· Stop leak if you can do it without risk.

SMALL LIQUID SPILLS: Take up with sand, earth or other non-combustible absorbent material.

LARGE SPILLS: Dike far ahead of liquid spill for later disposal.

Entrol of files. Billo fair arroad of figure opin for factor an

Format: EU CLP/REACH Language: English (US) EU CLP, UN GHS Revision 4, OSHA HCS 2012, WHMIS

Pick up and transfer to properly labeled containers.

This material and its container must be disposed of as hazardous waste.

6.4 Reference to other sections

 Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling

· Use good safety and industrial hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Keep only in the original container.

7.3 Specific end use(s)

· Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines

No applicable exposure limits available for product or components.

8.2 Exposure controls

Engineering

Measures/Controls

 Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal Protective Equipment

Respiratory

In case of insufficient ventilation, wear suitable respiratory equipment.

Eye/Face

· Wear face shield and eye protection.

Skin/Body

Wear long sleeves and/or protective coveralls. Wear appropriate gloves.

Environmental Exposure

Controls

Follow best practice for site management and disposal of waste. Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

Section 9 - Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Material Description					
Physical Form	Liquid Appearance/E		Colorless liquid with no odor.		
Color	Colorless	Odor	Odorless		
Odor Threshold	Data lacking				
General Properties	General Properties				
Boiling Point	Data lacking	Melting Point/Freezing Point	Data lacking		
Decomposition Temperature	Data lacking	рН	8.3		
Specific Gravity/Relative Density	Data lacking	Water Solubility	Data lacking		
Viscosity	Data lacking	Explosive Properties	Data lacking		
Oxidizing Properties:	Data lacking				
Volatility	_	-	-		

Preparation Date: 15/June/2017 Revision Date: 15/June/2017

Vapor Pressure	Data lacking	Vapor Density	Data lacking	
Evaporation Rate	Data lacking			
Flammability				
Flash Point	Data lacking	UEL	Data lacking	
LEL	Data lacking	Autoignition	Data lacking	
Flammability (solid, gas)	Data lacking			
Environmental				
Octanol/Water Partition coefficient	Data lacking			

9.2 Other Information

· No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

· No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

· Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

• Can react briskly with oxidizers - danger of explosion.

10.4 Conditions to avoid

· Incompatible materials. Ignition sources. Excess heat.

10.5 Incompatible materials

· Strong oxidizing agents.

10.6 Hazardous decomposition products

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon monoxide. Carbon dioxide (CO2)

Section 11 - Toxicological Information

11.1 Information on toxicological effects

GHS Properties	Classification
Acute toxicity	EU/CLP • Data lacking UN GHS 4 • Data lacking OSHA HCS 2012 • Data lacking WHMIS 2015 • Data lacking
Skin corrosion/Irritation	EU/CLP • Data lacking UN GHS 4 • Data lacking OSHA HCS 2012 • Data lacking WHMIS 2015 • Data lacking
Serious eye damage/Irritation	EU/CLP • Data lacking UN GHS 4 • Data lacking OSHA HCS 2012 • Data lacking WHMIS 2015 • Data lacking
	EU/CLP • Data lacking

Preparation Date: 15/June/2017 Revision Date: 15/June/2017

Skin sensitization	UN GHS 4 • Data lacking OSHA HCS 2012 • Data lacking WHMIS 2015 • Data lacking
Respiratory sensitization	EU/CLP • Data lacking UN GHS 4 • Data lacking OSHA HCS 2012 • Data lacking WHMIS 2015 • Data lacking
Aspiration Hazard	EU/CLP • Data lacking UN GHS 4 • Data lacking OSHA HCS 2012 • Data lacking WHMIS 2015 • Data lacking
Carcinogenicity	EU/CLP • Data lacking UN GHS 4 • Data lacking OSHA HCS 2012 • Data lacking WHMIS 2015 • Data lacking
Germ Cell Mutagenicity	EU/CLP • Data lacking UN GHS 4 • Data lacking OSHA HCS 2012 • Data lacking WHMIS 2015 • Data lacking
Toxicity for Reproduction	EU/CLP • Data lacking UN GHS 4 • Data lacking OSHA HCS 2012 • Data lacking WHMIS 2015 • Data lacking
STOT-SE	EU/CLP • Data lacking UN GHS 4 • Data lacking OSHA HCS 2012 • Data lacking WHMIS 2015 • Data lacking
STOT-RE	EU/CLP • Data lacking UN GHS 4 • Data lacking OSHA HCS 2012 • Data lacking WHMIS 2015 • Data lacking

Potential Health Effects

Inhalation

Acute (Immediate)

Avoid breathing vapors or mists. May cause irritation of respiratory tract.

Chronic (Delayed)No data available

Skin

Acute (Immediate)

· No data available

Chronic (Delayed)

Prolonged contact may cause redness and irritation. Repeated exposure may cause aking drynges or gracking.

skin dryness or cracking.

Eye

Acute (Immediate)

· Redness. May cause slight irritation.

Chronic (Delayed)

· No data available

Ingestion

Acute (Immediate)

 May cause drowsiness or dizziness. Ingestion causes burns of the upper digestive and respiratory tracts. Symptoms include burning sensation, coughing, wheezing, shortness of breath, headache, nausea, and vomiting.

Chronic (Delayed)

· No data available

Section 12 - Ecological Information

12.1 Toxicity

	CAS	
Custom Protoscript II 10X Reaction Primer Mix	NDA	Aquatic Toxicity-Fish: 96 Hour(s) LC50 Oncorhynchus mykiss 6800 mg/L Comments: Potassium Acetate (127-08-2) Aquatic Toxicity-Crustacea: 24 Hour(s) EC50 Water Flea Daphnia magna 7170 mg/L Comments: Potassium Acetate (127-08-2)

• 7.97 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

12.2 Persistence and degradability

· Material data lacking.

12.3 Bioaccumulative potential

Material data lacking.

12.4 Mobility in Soil

Material data lacking.

12.5 Results of PBT and vPvB assessment

No PBT and vPvB assessment has been conducted.

12.6 Other adverse effects

No studies have been found.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste

 Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA
TDG	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA
IMO/IMDG	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA
IATA/ICAO	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA

Page 7 of 8

14.6 Special precautions for • None specified. user

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Preparation Date: 15/June/2017

Data lacking.

Section 15 - Regulatory Information

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

SARA Hazard Classifications • None

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out.

Section 16 - Other Information

Revision Date • 15/June/2017
Preparation Date • 15/June/2017

Disclaimer/Statement of Liability

• The information herein is given in good faith but no warranty, expressed or implied, is made.