Date: 21 November 2018

SAFETY DATA SHEET

Positive Control Primer and Probe Mix

This Safety Data Sheet contains information concerning the potential risks to those involved in handling, transporting and working with the material, as well as describing potential risks to the consumer and the environment. This information must be made available to those who may come into contact with the material or are responsible for the use of the material. This Safety Data Sheet is provided on a voluntary basis and follows the formatting described in the REACH Regulation (EC) No 1907/2006 and the CLP Regulation (EC) No 1272/2008.

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

1.1 Product identifier

Positive Control Primer and Probe Mix

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

Laboratory Reagent

1.3 Details of the supplier of the safety data sheet

TwistDx Ltd Abbott House Vanwall Business Park Vanwall Road Maidenhead SL6 4XE United Kingdom

Telephone: +1-877-450-6901

info@twistdx.co.uk

1.4 Emergency telephone number

In case of emergency Tel. +1-703-741-5970 (+1-800-424-9300 for US, Canada)

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

Not classified as hazardous according to the CLP Regulation (EC) No 1272/2008

2.2 Label elements

E-mail

No label required according to the CLP Regulation (EC) No 1272/2008



2.3 Other hazards

No special hazards

SECTION 3: Composition

3.1 Substances

Not applicable, the product is a mixture

3.2 Mixtures

| Name | CAS No, EC No, Registration No (if available) | Concentration | Classification |
|--|---|---------------|--|
| Tris | 77-86-1 201-064-4 | <1% | Not classified as hazardous |
| Ethylenediamine tetraacetic acid (EDTA) | 60-00-4 200-449-4 | <0.1% | Eye Irrit 2 H319 Acute Tox 4 H332 STOT RE 2 H373 |
| Deoxyribonucleic acid | 9007-49-2 | <1% | Not classified as hazardous |

See section 16 for full description of H statements.

SECTION 4: First Aid Measures

4.1 Description of first aid measures

EYE CONTACT: Wash thoroughly with water and obtain medical attention if signs of discomfort.

INHALATION: Remove from exposure. If breathing becomes difficult call a doctor.

SKIN CONTACT: Wash off with soap and water. Seek medical attention if irritation occurs.

INGESTION: If swallowed, rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

No information available

4.3 Indication of any immediate medical attention and special treatments needed

Symptomatic treatment as required

SECTION 5: Firefighting Measures

5.1 Extinguishing media

Not combustible. Use extinguishing media appropriate to surrounding conditions.



5.2 Special hazards arising from the substance or mixture

No special hazards.

5.3 Advice for fire fighters

No special measures required.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Remove unnecessary personnel away from area of spill or contamination. Wear suitable protective clothing including eye protection, gloves and lab coat or coveralls. See section 8 for more information.

6.2 Environmental precautions

Prevent entry into drains and watercourses.

6.3 Methods and materials for containment and clearing up

Small quantities (<500 mls) may be absorbed onto a suitable absorbent or paper towels and place in a sealed container for disposal. Wash spill area thoroughly with water and detergent.

6.4 References to other sections

See section 8 for further advice on protective equipment and section 13 for advice on disposal.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Store at -80°C for long term stability of product.

7.3 Specific end uses(s)

Only for use as a laboratory reagent

SECTION 8. Exposure Controls/Personal Protection

8.1 Control parameters

No exposure limits available



Engineering controls

None usually required. If spray or mists are likely to be generated, handle in a fume cupboard.

Respiratory protection

Not normally required. If spray or mists are likely to be generated, respiratory protection may be required.

Hand Protection

Wear suitable chemical resistant gloves. Change gloves in accordance with manufacturer recommendations. If gloves are damaged during use, remove immediately and wash hands before replacing with new gloves.

Eye protection

Wear safety glasses with side protection to prevent splashes to the eye.

Skin protection

Wear suitable protective clothing – lab coat or coveralls. These should be changed after use or if contaminated. Wash before re-use.

Environmental Exposure

Prevent unnecessary releases to the environment.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:Clear liquidOdour:No odourOdour threshold:Not applicable

pH: No data

Melting point: Similar to water Boiling point: Similar to water Flashpoint: Not flammable **Evaporation rate:** Similar to water Flammability (gas, solid): Not applicable Upper/lower flammability limits: Not flammable Vapour pressure: Similar to water Vapour density: Similar to water Relative density: Approximately 1.0

Solubility in water: Soluble
Solubility in other solvents: No data
Partition coefficient (log Kow): No data

Autoignition temperature: Not flammable

Decomposition temperature: No data **Viscosity:** No data

Explosive properties: Not classified as explosive



Oxidising properties: Not classified as oxidising

9.2 Other information

None

SECTION 10: Stability and Reactivity

10.1 Reactivity

No reactive hazards known

Chemical stability

Stable under the recommended storage conditions

Possibility of hazardous reactions 10.3

Not expected to occur.

10.4 Conditions to avoid

Excessive heat

10.5 Incompatible materials

None known

10.6 Hazardous decomposition products

None known

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

This product has not been tested. Judgements on the expected toxicity of this product have been made based upon consideration of its major components.

(a) acute toxicity Not expected to be acutely toxic

(b) skin corrosion/irritation Splashes may be mildly irritating to skin.

(c) serious eye damage/irritation Splashes to the eye may be mildly irritating.

(d) respiratory/skin sensitisation Repeated inhalation of enzyme spray or dust following inappropriate

handling may result in sensitisation and cause allergic reactions in

sensitised individuals.

(e) germ cell mutagenicity

Contains no substances classified for germ cell mutagenicity.

(f) carcinogenicity

Contains no known carcinogens

(g) reproductive toxicity

Contains no known reproductive toxicants.

(h) STOT-single exposure

contains no substances classified for target organ toxicity following single exposure.

Unwind DNA's possibilities

(i) STOT-repeated exposure No data available.

(j) aspiration hazard Contains no substances known to present an aspiration hazard.

SECTION 12: Ecological Information

This product has not been tested. Judgements on the expected environmental effects of this product have been made based upon consideration of its major components.

12.1 Toxicity

None of the components are classified as hazardous to the environment

12.2 Persistence and degradability

The organic components are expected to be rapidly biodegraded

12.3 Bioaccumulative potential

None of the components are expected to bioaccumulate

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

A formal PBT/vPvB assessment has not been carried out, but none of the components are expected to be PBT or vPvB.

12.6 Other adverse effects

None known

SECTION 13: Disposal Considerations

13.1 Waste treatment methods

Small quantities of this material (<500 millilitres) may be disposed of by mixing with an excess of 10% sodium hypochlorite before being flushed with an excess of water to foul drainage. A dilution factor of at least 100 is recommended. Larger quantities of waste should be disposed of in a manner that complies with local regulations.

SECTION 14: Transport Information

14.1 UN Number Not classified as hazardous

14.2 UN Proper shipping name
 14.3 Transport hazard class(es)
 14.4 Packing group
 14.5 Environmental hazards
 Not applicable
 Not applicable
 Not applicable

14.6 Special precautions for user None

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



Date: 21 November 2018

Not transported in bulk

SECTION 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture All components are listed as existing substances in Europe.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this product.

SECTION 16: Other Information

Revision information: New form

List of Abbreviations used in this SDS:

CAS Chemical Abstracts Service

CLP Classification, Labelling and Packaging Regulation (EC) no 1272/2008

DSD Dangerous Substances Directive 67/548/EEC

DPD Dangerous Preparations Directive 1999/45/EC

EC European Community/Commission

PBT Persistent, Bioaccumulative and Toxic

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) no 1907/2006

vPvB very Persistent, very Bioaccumulative

References:

ECHA Classification and Labelling Inventory and Database of Disseminated Registration Dossiers

Method used for classification of mixtures:

Ingredient based approaches

H Statements used in Section 3

H319 Causes serious eye irritation

H335 May cause respiratory irritation

H373 May cause damage to organs through prolonged or repeated exposure if inhaled

Training requirements for workers

None

