THIS PRODUCT IS CONSIDERED NON-HAZARDOUS. This product does not contain more than 1% of a component classified as hazardous and does not contain more than 0.1% of a component classified as carcinogenic in the GHS and CLP Regulation (EC) No 1272/2008. Therefore, per Global Harmonised Standards (GHS) ST/SG/AC.10/30/Rev.6, OSHA 29CFR1910.1200, Commonwealth of Australia [NOHSC: 1005, 1008(1999)], and the latest amendments to the Regulation (EC) No 1272/2008, this product does not require a Safety Data Sheet (SDS) or Material Safety Data Sheet (MSDS).
1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND OF THE SUPPLIER.

1.1 PRODUCT NAME
The product contains small amounts of synthetic DNA gene fragments in the form of frozen liquid, provided in a capped plastic tube. This SDS applies to all variations of Synthetic Positive Controls and extraction control.
The composition of the products varies only in terms of the DNA sequence.

<table>
<thead>
<tr>
<th>REF (Cat. No.)</th>
<th>Product Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>91011</td>
<td>Synthetic Positive Controls for Respiratory Pathogens</td>
</tr>
<tr>
<td>91021</td>
<td>Synthetic Positive Controls for STDs and Herpes</td>
</tr>
<tr>
<td>91031</td>
<td>Synthetic Positive Controls for Faecal Panels</td>
</tr>
<tr>
<td>91051</td>
<td>Synthetic Positive Controls for Bacteria and Bacterial Resistance</td>
</tr>
<tr>
<td>91071</td>
<td>Synthetic Positive Controls for Atypical Pneumonia</td>
</tr>
<tr>
<td>91081</td>
<td>Synthetic Positive Controls for CSF</td>
</tr>
<tr>
<td>91091</td>
<td>Synthetic Positive Controls for Fungal Panels</td>
</tr>
<tr>
<td>91171</td>
<td>Synthetic Positive Controls for Haemochromatosis</td>
</tr>
<tr>
<td>91191</td>
<td>Synthetic Positive Controls for HPV</td>
</tr>
<tr>
<td>91441</td>
<td>Synthetic Positive Controls for Sepsis</td>
</tr>
<tr>
<td>91401</td>
<td>Extraction Control (100µl)</td>
</tr>
</tbody>
</table>

1.2 OTHER MEANS OF IDENTIFICATION
N/A

1.3 RECOMMENDED USE
Synthetic Positive Controls and Extraction Control products are intended to be used as accessory products with AusDiagnostics MT-PCR Systems.

1.4 TECHNICAL ENQUIRIES
For assistance or if any issues recur, please contact AusDiagnostics at the addresses below.
2. HAZARDS IDENTIFICATION.

2.1 GHS CLASSIFICATION AND NATIONAL OR REGIONAL INFORMATION


This product does not contain more than 1% of a component classified as hazardous and does not contain more than 0.1% of a component classified as carcinogenic in GHS and Regulation (EC) No 1272/2008. Despite the classification of certain products/components as non-hazardous, we strongly recommend using prudent laboratory practices: avoiding unnecessary contact and use of personal protective equipment (PPE), which may include gloves, eye protection, and lab coats, during the use of any laboratory reagent.

AusDiagnostics shall not be held liable for any damages resulting from handling or from contact with the above product.

2.2 GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

- Pictogram: N/A
- Signal Word: N/A
- Hazard Statements: N/A
- Precautionary statements: N/A

2.3 OTHER HAZARDS

N/A

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 MIXTURES

Description, Synthetic DNA purified from pUC57 plasmid in E.coli.

Major Constituent, Deoxyribonucleic acid (DNA).

Synonyms, DNA primers, nucleic acid, DNA, deoxyribonucleic acid.

CAS #, None.

Dangerous Components, None.

Contains, C, H, N, O, P. May contain S.

4. FIRST AID MEASURES

4.1 DESCRIPTION OF NECESSARY MEASURES, ACCORDING TO DIFFERENT ROUTES OF EXPOSURE

- After Inhalation, Remove to fresh air. If irritation persists seek medical attention.

- After ingestion, do not induce vomiting. Wash mouth out with water, provided the person is conscious. Seek medical attention immediately.

- After Contact with Skin, Immediately wash with soap and copious amounts of water. If irritation is present get medical attention.

- After Contact with Eyes, Immediately flush eyes with copious amounts of water for several minutes. Consult a doctor immediately.
4.2 MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED
May cause skin, eye and respiratory irritation.
To the best of our knowledge the symptoms/effects, acute and delayed of exposure to Synthetic Positive Controls have not been fully investigated, however skin contact, eye contact and ingestion should be avoided.

4.3 INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENTS
There is no specific antidote. Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

5.1 SUITABLE EXTINGUISHING MEDIA
Water spray, CO2 or dry chemical powder. Large fires should be confronted with water spray or alcohol resistant foam.

5.2 SPECIFIC HAZARDS ARISING FROM THE CHEMICAL
No data is available for specific hazards of this product as a whole.
Specific Hazards, Emits toxic fumes under fire conditions.

5.3 FIRE FIGHTING PROTECTIVE MEASURES
Wear protective clothing to prevent contact with the skin and eyes.
Wear self contained breathing equipment to prevent inhalation of explosive or combustion gases.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES
Wear appropriate protective clothing and chemically compatible gloves. Place spillage in appropriate container for waste disposal and ensure ventilation is adequate.

6.2 ENVIRONMENTAL PRECAUTIONS
Do not dispose to surface, ground water or sewers.

6.3 METHODS AND MATERIALS FOR CONTAMINATION AND CLEAN UP
Use a liquid-binding material (e.g. sand, sawdust, diatomite etc.) to absorb the spillage.
Place in closed containers for disposal. Ventilate area well after clean-up procedures have taken place.
Wear personal protection equipment (PPE) as outlined in Section 8.
Dispose of residue in accordance with federal, state, and local regulations.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING
This product is only to be used by trained personnel in qualified laboratories. Observe all federal, state and local regulations. Avoid contact with eyes, skin and clothing. Avoid ingestion and inhalation. Wash thoroughly after handling. Use prudent laboratory practices for handling and storage of chemical substances of unknown toxicity.

7.2 CONDITIONS FOR SAFE STORAGE
This product must be stored at -20°C (see applicable product label and IFU).
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS, INGREDIENTS WITH EXPOSURE LIMIT VALUES
N/A.

8.2 ENGINEERING MEASURES
N/A (see section 7).

8.3 INDIVIDUAL PROTECTION MEASURES, PERSONAL PROTECTION EQUIPMENT

- Respiratory Protection, N/A.
- Hand Protection, Gloves should be worn, either rubber or chemical resistant.
- Eye Protection, Wearing safety goggles is advised, as is the availability of eye-wash stations.
- Skin Protection, Lab coats should be worn during handling. Safety deluge showers should be available. User must wear appropriate protective gloves to prevent contact with this material.
- Hygiene Practices, Avoid contact with skin or eyes, do not place in mouth. Do not eat, drink or smoke when handling this product. Upon completion of the use of this product, dispose of protective gloves safely and wash hands thoroughly with soap and water.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Frozen Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>odourless</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower and upper explosion limit/flammability limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Product is not self-igniting</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Fully water soluble</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Density and/or relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density</td>
<td>No data available</td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

10.1 REACTIVITY
Dangerous Reactions, Avoid contact with strong oxidising agents. Hazardous Decomposition Products, Carbon oxides, sulphur oxides.

10.2 CHEMICAL STABILITY
Product is stable under normal handling and storage conditions (below -20˚C, as per product label and IFU). Avoid excess heat, flame and pressure.

10.3 HAZARDOUS REACTIONS
Not known.

10.4 CONDITIONS TO AVOID
No dangerous reactions known if used according to specifications.

10.5 INCOMPATIBLE MATERIALS
Not known.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS
Not known.

11. TOXICOLOGICAL INFORMATION
Concise but complete and comprehensible description of the various toxicological (health) effects and the available data used to identify those effects.

11.1 INFORMATION ON THE LIKELY ROUTES OF EXPOSURE
- Inhalation, may be harmful if inhaled. May cause respiratory tract irritation.
- Skin, may be harmful if absorbed through skin, may causes skin irritation.
- Eyes, may cause eye irritation.
- Ingestion, may be harmful if swallowed.

11.2 SYMPTOMS RELATED TO THE CHEMICAL, PHYSICAL AND TOXICOLOGICAL PROPERTIES
To the best of our knowledge the chemical, physical and toxicological properties have not been fully investigated.

<table>
<thead>
<tr>
<th>Acute Health Effects</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic Health Effects</td>
<td>This product does not contain any hazardous components above 1% or any carcinogens above 0.1% as defined in GHS and CLP.</td>
</tr>
<tr>
<td>Carcinogenic Effects</td>
<td>N/A</td>
</tr>
<tr>
<td>Mutagenic Effects</td>
<td>N/A</td>
</tr>
<tr>
<td>Teratogenic Effects</td>
<td>N/A</td>
</tr>
<tr>
<td>Developmental Toxicity</td>
<td>N/A</td>
</tr>
<tr>
<td>Hazards</td>
<td>N/A</td>
</tr>
</tbody>
</table>
11.3 SIGNS AND SYMPTOMS OF EXPOSURE

- Acute toxicity, no data available.
- Irritation and corrosion, no data available.
- Sensitisation, no data available.
- Chronic exposure, no data available.

11.4 NUMERICAL MEASURES OF TOXICITY

No data available.

12. ECOLOGICAL INFORMATION

12.1 ECOTOXICITY EFFECTS

No data available.

12.2 ELIMINATION INFORMATION (PERSISTENCE AND DEGRADABILITY)

No data available.

12.3 BIOACCUMULATIVE POTENTIAL

No data available.

12.4 MOBILITY IN SOIL

No data available.

12.5 OTHER ADVERSE EFFECTS

No data available.

13. DISPOSAL CONSIDERATIONS

13.1 PRODUCT DISPOSAL

- Disposal must be made according to regional and national regulations.
- Must not be disposed together with household waste.
- Do not allow product to reach sewage system.

13.2 CONTAMINATED PACKAGING DISPOSAL

Contaminated packaging should be disposed of according to official regulations.

14. TRANSPORT INFORMATION

Shipment is made as a non-regulated material. No transportation restrictions apply. The acute toxicity profile does not warrant shipment as a hazardous material (DOT) or a dangerous good (IATA).

14.1 UN NUMBER

N/A

14.2 UN PROPER SHIPPING NAME

- ADR / RID, Not hazardous good
- IMDG–Code / ICAO–TI / IATA–DGR, None

14.3 TRANSPORT HAZARD CLASS

Land, Maritime, and Air Transport, Not dangerous goods

14.4 PACKING GROUP

N/A
14.5 ENVIRONMENTAL HAZARDS
N/A

14.6 TRANSPORT IN BULK (ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE)
N/A

14.7 SPECIAL PRECAUTIONS FOR USER
N/A

15. REGULATORY INFORMATION
Safety, health and environmental regulations/ specific legislation for the substance or mixture.
The toxicological properties of this material have not been investigated.
EU-Regulations, Regulation (EC) No 1272/2008
Labelling According to EU Guidelines
National regulations, Not determined
Other relevant regulations, Global Harmonised Standards (GHS)

16. DISCLAIMER
The information provided in this Safety Data Sheet (SDS) is accurate to the best of our present knowledge. However, this does not constitute a guarantee for any specific product features.
All substances and preparations may present unknown hazards and should be used with caution.
AusDiagnostics shall not be held liable for any damage resulting from the handling of or from contact with the above product. The information supplied in this SDS shall not establish a legally valid contractual relationship.

17. DOCUMENT HISTORY

<table>
<thead>
<tr>
<th>Document ID of SDS</th>
<th>Date of Change</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDS-SPC-r09</td>
<td>14/02/2020</td>
<td>Extraction control added</td>
</tr>
<tr>
<td>SDS-SPC-r08</td>
<td>01 Dec 2019</td>
<td>The format of the document have been changed, update contact details and a change of the document name.</td>
</tr>
<tr>
<td>SDS-SynthContr-r06</td>
<td>4 Dec. 2017</td>
<td>Manufacturer address updated</td>
</tr>
<tr>
<td>SDS-SynthContr-r05.1</td>
<td>3 Oct. 2017</td>
<td>Minor correction – page 1; product description updated to 10 x 50 µl aliquot.</td>
</tr>
<tr>
<td>SDS-SynthContr-r05</td>
<td>28 Sept. 2017</td>
<td>IMPORTANT: No new warnings or updates to safe use of product. Instrument name updated to High-Plex 24 System and Ultra-Plex 48 system consisting of MT Processor and MT Analyser. Product catalogue numbers updated to 5 digits. Product description updated to 10 x 50 µl aliquot.</td>
</tr>
<tr>
<td>SDS-SynthContr-r04</td>
<td>11 Nov. 2016</td>
<td>IMPORTANT: No new warnings or updates to safe use of product. Changes made to comply with the GHS revision 6.</td>
</tr>
</tbody>
</table>