SAFETY DATA SHEET (SDS) 
ACCORDING TO GHS AND CLP 
MASTERMIX TUBES AND REAGENT CASSETTES

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 0.2% of a component classified as carcinogenic in the GHS and CLP Regulation (EC) No 1272/2008. Therefore, per Global Harmonised Standards (GHS) ST/SIG/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 Mastermix and reagent cassettes are used for the same purpose and contain similar components, however they are packaged differently. See below for relevant products. These products have only minor differences in their composition. Products with RNA in their product description contain a reverse transcriptase enzyme. The other product differences refer only to volume differences.

<table>
<thead>
<tr>
<th>REF (Cat. no.)</th>
<th>Description</th>
<th>REF (Cat. no.)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>40220DNA</td>
<td>Medium Volume DNA Mastermix</td>
<td>40320RNA</td>
<td>Medium Volume RNA Mastermix</td>
</tr>
<tr>
<td>40230DNA</td>
<td>Low Volume DNA Mastermix</td>
<td>40330RNA</td>
<td>Low Volume RNA Mastermix</td>
</tr>
<tr>
<td>40240DNA</td>
<td>Demi (Half) Volume DNA Mastermix</td>
<td>40340RNA</td>
<td>Demi (Half) Volume RNA Mastermix</td>
</tr>
<tr>
<td>40231DNA</td>
<td>Low Volume DNA Reagent Cassettes</td>
<td>40331RNA</td>
<td>Low Volume RNA Reagent Cassettes</td>
</tr>
<tr>
<td>40241DNA</td>
<td>Demi (Half) DNA Reagent Cassettes</td>
<td>40341RNA</td>
<td>Demi (Half) RNA Reagent Cassettes</td>
</tr>
<tr>
<td>40221DNA</td>
<td>Medium Volume DNA Reagent Cassettes</td>
<td>40321RNA</td>
<td>Medium Volume RNA Reagent Cassettes</td>
</tr>
</tbody>
</table>

1.2 OTHER MEANS OF IDENTIFICATION
N/A

1.3 RECOMMENDED USE
Products are for use on MT-PCR systems.

1.4 TECHNICAL ENQUIRIES

For assistance or if any issues recur, please contact AusDiagnostics.
Email: info@ausdiagnostics.com
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 0.2% 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

There are no chemicals present in this product that are above their cut-off values which are classified as hazardous or carcinogenic present.

Description, Enzymes in buffer required for Polymerase Chain Reaction (PCR).

Major Constituent, PCR enzymes and buffer.

Synonyms, master mix buffer, mastermix, PCR buffer, reaction buffer.

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, 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 Mastermix substance 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. Mastermix Tubes and Reagent Cassettes ver 01 only contains (2R,3S)-1,4-Bis(sulfanyl)butane-2,3-diol (dithioerythritol) in a non hazardous concentration.
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 below -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 CONTROL 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>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Step 1 - colourless</td>
</tr>
<tr>
<td></td>
<td>Step 2 - pale orange</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.

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 HAZARDUS REACTIONS
Not known.

10.4 CONDITIONS TO AVOID
No dangerous reactions known if used according to specifications. Do not use in temperatures above -20°C.

10.5 INCOMPATIBLE MATERIALS
Not known.

10.6 HAZARDUS 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 0.2% 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, No 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-MM-RC-r10</td>
<td>01 Dec 2019</td>
<td>Reagent Cassettes have been added. Change of format to the document, and update contact details.</td>
</tr>
<tr>
<td>SDS-Mastermix-r08</td>
<td>04 Dec 2017</td>
<td>Manufacturer address updated</td>
</tr>
<tr>
<td>SDS-Mastermix-r07.1</td>
<td>03 Oct 2017</td>
<td>Minor correction – Document History; previous document ID corrected</td>
</tr>
<tr>
<td>SDS-Mastermix-r07</td>
<td>28 Sep 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. No new warnings or updates to safe use of product. High Mastermix products (40210 and 40310) removed as they are no longer produced by AusDiagnostics</td>
</tr>
<tr>
<td>SDS-Mastermix06</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>