

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 CLP Regulation (EC) No 1272/2008, this product does not require a Safety Data Sheet (SDS) or Material Safety Data Sheet (MSDS).

1. Identification Of The Substance Or Mixture And Of The Supplier

A) Product Name:

Mastermix. 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.

REF (Cat. no.)	Description	REF (Cat. no.)	Description
40220DNA	Medium Volume Mastermix	40320RNA	Medium Volume RNA Mastermix
40230DNA	Low Volume Mastermix	40330RNA	Low Volume RNA Mastermix
40240DNA	Demi (Half) Volume Mastermix	40340RNA	Demi (Half) Volume RNA Mastermix

B) Other means of identification:

N/A

C) Recommended Use:

Mastermix products are intended to be used as a kit component on the AusDiagnostics MT-PCR Systems.

D) Supplier's Details:

Contact in case of emergency:

Australian Office: Monday – Friday: 8 am to 6 pm (AEST):

AusDiagnostics Pty Ltd
290-292 Coward St, Mascot
NSW 2020
Tel: +61 (02) 9698 8030
E: info@ausdiagnostics.com

UK Office: Monday – Friday: 9 am to 5 pm (GMT/BST):

AusDiagnostics UK Ltd. UK
Unit 3,
Anglo Business Park, Asheridge Road,
Chesham, Bucks,
HP5 2QA
United Kingdom
Tel: +44 (0)1494 300121

E) Emergency Phone number: See contact details above

2. Hazards Identification

A) GHS classification and national or regional information:

THIS PRODUCT IS CONSIDERED NON-HAZARDOUS. Per 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 Material Safety Data Sheet (MSDS) or Safety Data Sheet (SDS).

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 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, 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.

B) GHS Label Elements, Including Precautionary Statements:

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

C) Other Hazards:

None

3. Composition/ Information On Ingredients

B) Mixtures:

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

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

A) Description of necessary measures, according to different routes of exposure:

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

- After Contact with Skin: Immediately wash with soap and copious amounts of water. If irritation is present, seek medical attention.
- After Contact with Eyes: Remove contact lenses if present and immediately flush eyes with copious amounts of water for several minutes. Seek medical attention immediately.
- After ingestion: Do not induce vomiting. Wash mouth out with water, provided the person is conscious. Seek medical attention immediately.

B) Most important symptoms/effects, acute and delayed:

May cause skin, eye and respiratory irritation.

There is no information available on the health risks of the Mastermix substance as a whole but skin contact, eye contact and ingestion should be avoided.

C) Indication of immediate medical attention and special treatments:

There is no specific antidote. Treat symptomatically and supportively.

5. Fire Fighting Measures

A) Suitable Extinguishing Media:

Water spray, carbon dioxide, alcohol resistant foam or dry chemical powder.

B) Specific hazards arising from the chemical:

No data is available for specific hazards of this product as a whole. However, its composite chemicals have identified the following as specific hazards that may arise: Carbon oxides, nitrogen oxides (NO_x), Sulphur oxides, Hydrogen chloride gas, Potassium oxides, Magnesium oxide.

Specific Hazards: Emits toxic fumes under fire conditions.

C) 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

A) Personal precautions, protective equipment and emergency procedures:

Wear appropriate protective clothing and chemically compatible gloves. Place spillage in appropriate container for waste disposal. Ensure ventilation is adequate.

B) Environmental Precautions:

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

C) Methods and materials for containment 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

A) Precautions for safe handling:

This product is only to be used by trained staff. 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.

B) Conditions for safe storage:

This product is stable when stored as directed (see applicable product label and IFU). It must be stored below -20 °C.

8. Exposure Controls/ Personal Protection

A) Control parameters - ingredients with exposure limit Values:

None

B) Engineering controls:

None required, see section 7.

C) Individual protection measures - Personal Protective equipment:

- *Respiratory Protection:* None required.
- *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

Property	Details
Physical State	Liquid
Colour	Step 1 - colourless Step 2 - pale orange
Odour	odourless
Melting point/freezing point	No data available
Boiling point/Boiling range	No data available
Flammability	No data available
Lower and upper explosion limit/ flammability limit	No data available

Flash point	No data available
Auto-ignition temperature	Product is not self-igniting
Decomposition temperature	No data available
pH	No data available
Kinematic viscosity	No data available
Solubility	Fully water soluble
Partition coefficient	No data available
Vapour pressure	No data available
Density and/or relative density	No data available
Relative vapour density	No data available
Particle characteristics	No data available

10. Stability And Reactivity

A) Reactivity:

Dangerous Reactions: Avoid contact with strong oxidising agents, acids and alkali.

B) Chemical Stability:

Product is stable under normal handling and storage conditions (see applicable product label and IFU). Avoid excess heat, flame and pressure.

C) Possible Hazardous Reactions:

Not known

D) Conditions to avoid:

No dangerous reactions known if used according to specifications. Temperatures above -20 °C.

E) Incompatible materials:

Not known

F) 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, including:

A) Information on the likely routes of exposure:

- Inhalation: May be harmful if inhaled. May cause respiratory tract irritation
- Ingestion: May be harmful if swallowed
- Skin: May be harmful if absorbed through skin. May cause skin irritation

- Eyes: May cause eye irritation

B) Symptoms related to the chemical, physical and toxicological properties

To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated.

Acute Health Effects:	N/A
Chronic Health Effects:	This product does not contain any hazardous components above 1% or any carcinogens above 0.1% as defined in GHS and CLP.
Carcinogenic Effects:	N/A
Mutagenic Effects:	N/A
Teratogenic Effects:	N/A
Developmental Toxicity:	N/A
Hazards:	N/A

C) 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

D) Numerical measures of toxicity:

No data available

12. Ecological Information

A) Ecotoxicity effects:

No data available

B) Elimination information (persistence and degradability):

No data available

C) Bioaccumulative potential:

No data available

D) Mobility in soil:

No data available

E) Other adverse effects:

No data available

13. Disposal Considerations

A) Product Disposal

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

B) Contaminated Packaging Disposal:

Contaminated packaging should be disposed of according to regional and national regulations.

14. Transport Information

Ship 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).

A) UN number:

None

B) UN proper shipping name:

- ADR / RID: No hazardous good
- IMDG-Code / ICAO-TI / IATA-DGR: None

C) Transport hazard classes:

Land, Maritime, and Air Transport: Not dangerous goods

D) Packing group:

None

E) Environmental hazards:

N/A

F) Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC code):

N/A

G) 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. Other Information

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 does not establish a legally valid contractual relationship.

17. Document History:

This document replaces the previous versions of SDS for Mastermix. See changes below.

Document ID of SDS	Date of Change	Changes
SDS-Mastermix-r09	13 Feb. 2018	Added mention of the CLP Regulation (Regulation (EC) No 1272/2008 which replace the current rules on classification, labelling and packaging of substances (Directive 67/548/EEC) and mixtures (Directive 1999/45/EC).
SDS-Mastermix-r08	04 Dec. 2017	Manufacturer address updated
SDS-Mastermix-r07.1	03 Oct. 2017	Minor correction - Document History; previous document ID corrected
SDS-Mastermix-r07	28 Sept. 2017	IMPORTANT: No new warnings or updates to safe use of product. Instrument name updated to <i>High-Plex 24 System</i> and <i>Ultra-Plex 48 system</i> 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
SDS-Mastermix-r06	11 Nov. 2016	IMPORTANT: No new warnings or updates to safe use of product. Changes made to comply with the GHS revision 6.

END OF SDS