

SECTION 1

Identification of the substance/mixture and of the company/undertaking

Catalogue number

R002M, R002L

Product name

SynRT Reverse Transcriptase MasterMix

Pure substance/mixture

Mixture

Chemical names, common names

Not applicable

Unique Formula Identifier (UFI number)

Not applicable

Recommended use

Research use

Uses advised against

Consumer use

Details of the supplier of the safety data sheet

Synthbiotics Kft.
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Emergency details:

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SECTION 2

Hazard identification

Classification of the substance or mixture

This mixture is classified as not hazardous according to regulation (EC) 1272/2008

Label elements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008

Hazard statements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008

Other hazards

No information available

SECTION 3

Composition / Information of Ingredients

Substances

Irrelevant

Mixtures

We recommend handling all chemicals with caution. Mixture of the substances listed below with nonhazardous additions.

	Content (%)	REACH number	CAS number/EC number	Classification
Nucleotidyltransferase, deoxyribonucleate	1-10	-	9012-90-2/ 232-741-2	Biological Constituent SDS data N/A

The main component is water. The other components of the mixture are a reaction buffer with nonhazardous elements and other minor ingredients.

SECTION 4

First aid measures

General information

Water is the main component of this solution. This mixture is not hazardous, thus no special measures required.

Description of first aid measures

Inhalation	Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.
Skin contact	Wash skin with soap and water. Generally, the product does not irritate the skin. In the case of skin irritation or allergic reactions see a physician.
Eye contact	Check for and remove contact lenses if present. Rinse opened eye immediately with with plenty of water, also wash under the eyelids, for several minutes. Seek medical advice if irritation occurs.
Ingestion	Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.
Notes to Physician	Treat symptomatically.

Most important symptoms and effects, both acute and delayed

No information available.

Indication of any immediate medical attention and special treatment needed

None needed. Treat symptomatically.

Special note regarding Biological Constituents

The Biological Constituents of this product are known to be non-infectious and non-hazardous. When this product is used in conjunction with bodily fluids universal precautions should be implemented.

Exposure limits

No compounds in this product have defined exposure limits.

SECTION 5

Firefighting measures

Extinguishing media

Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment: e.g. water spray, carbon dioxide (CO ₂), dry chemical powder, alcohol resistant foam.
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Unsuitable extinguishing media	None known.
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Special hazards arising from the substance or mixture

None known.

Advice for firefighters

Standard procedure for chemical fires. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6

Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Wear a lab coat to prevent spills from damaging clothing. See Section 8 for more information on personal protective equipment.

Environmental precautions

No special environmental precautions required. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Wipe up any spills of the solution with absorbent material (e.g., paper towels) and water. Dispose of the paper towels in appropriate containers.

Reference to other sections

No dangerous substances are released. See Section 7 for information on safe handling, Section 8 for further information on protective clothing and equipment, Section 12 for additional Ecological Information and Section 13 for disposal instructions.

SECTION 7

Handling and storage

Precautions for safe handling

Wear a lab coat to prevent spills from damaging clothing. Keep closed when not in use. Do not eat, smoke or drink where material is handled, processed or stored. Handle in accordance with good industrial hygiene and safety practice.

Information about protection against explosions and fires

No special measures required.

Conditions for safe storage, including any incompatibilities

Keep tightly closed in a dry place. Store at -20 °C.

Specific end use(s)

Recommended for research use, not recommended for consumer use.

SECTION 8

Exposure controls/personal protection**Control parameters**

There are no components with limit values that require monitoring at the workplace.

Exposure controls**Engineering controls**

No information available.

Eye/face protection

No special protective equipment required.

Skin and body protection

No special protective equipment required.

Respiratory protection

No special protective equipment required.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls

No special environmental precautions required.

Thermal hazards

No information available.

Other information

Wear a lab coat to prevent spills from damaging clothing. Do not eat, smoke or drink where material is handled, processed or stored. Handle according to established industrial hygiene and safety practices.

SECTION 9

Physical and chemical properties

Information on basic physical and chemical properties

Physical state: Colorless liquid

Form: Fluid

Colour: Colourless

Odour: Odourless

Odour threshold: Not determined.

pH-value: No data available.

Property	Values	Determination Method
Melting point/Melting range:	No data available.	
Boiling point/Boiling range:	No data available.	
Flash point:	No data available.	
Flammability (solid, gaseous)	No data available.	
Flammability Limit in Air	No data available.	
Ignition temperature:	No data available.	
Decomposition temperature:	No data available.	
Self igniting:	Not determined.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:	No data available.	
Vapour pressure at 20°C:	Not determined.	
Density:	Not determined.	
Relative density:	No data available.	
Vapour density:	Not determined.	
Evaporation rate:	Not determined.	
Solubility in water:	Readily soluble.	
Solubility in other solvents:	No data available.	
Segregation coefficient (n-octanol/water):	Not determined.	
Viscosity:	Not determined.	
Oxidising properties:	No data available.	
Particle characteristics:	No data available.	

Other information

No further relevant information available.

How to detect this substance

There are no unusual properties. The product's characteristics are very similar to those for water.

SECTION 10

Stability and Reactivity

Reactivity

No dangerous reaction known under conditions of normal use.

Chemical stability

Stable under recommended conditions for use and storage.

Sensitivity to mechanical impact

None known.

Sensitivity to static discharge

None.

Possibility of hazardous reactions

Hazardous reaction has not been reported.

Conditions to avoid

None known.

Incompatible materials
None known.

Hazardous decomposition products
None known.

SECTION 11

Toxicological information

Potential Health Effects

No long-term or immediate health effect from exposure to this product is presently known.

Acute toxicity

No information available.

Serious eye damage/irritation

No information available.

Dermal/skin corrosion/irritation

No information available.

Inhalation/respiratory

No information available.

Oral/ingestion

No information available.

Aspiration hazard

No information available.

Specific target organ toxicity – single exposure

No information available.

Specific target organ toxicity – repeated exposure

No information available.

Carcinogenicity

No information available.

Reproductive toxicity

No information available.

Germ cell mutagenicity

No information available.

Information on other hazards

Endocrine disrupting properties

No information available.

Other information

No information available.

SECTION 12

Ecological information

Toxicity

Contains no substances known to be hazardous to the environment or not degradable in waste water.

Environmental Fate (Degradation, Transformation, and Persistence)

Bio-concentration is not expected to occur.

Persistence and degradability

The enzyme is biodegradable.

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Result of PBT and vPvB assessment

No information available.

Endocrine disrupting properties

No information available.

Other adverse effects

None known.

SECTION 13

Disposal considerations

Waste treatment methods

Wipe up any spills of the solution with absorbent material (e.g., paper towels) and water. Dispose of the paper towels in appropriate containers. The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. Do not reuse empty containers. This material and its container must be disposed of in accordance with approved disposal technique. Disposal of this product, its container, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

SECTION 14

Transport information

ADR / IMDG / IATA / RID

This product is not subject to transport regulations.

UN Proper shipping name

Not determined.

UN number

Not determined.

Transport Hazard class

Not determined.

Environmental hazards - MP

Not determined.

ID number

Not determined.

Special precautions for the user
Not applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and IBC code
Not applicable.

Packing group
Not regulated.

Special Provisions
Not regulated.

Special precautions for user
Not applicable.

Transport/Additional information
Not dangerous according to the above specifications.

SECTION 15 Regulatory information

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

Substances of Very High Concern
None.

Substance subject to authorisation per REACH Annex XIV
None.

Restricted substances under EC 1907/2006, Annex XVII
None.

Regulation (EC) No 649/2012 (Rotterdam Convention - export/import of dangerous chemicals)
None.

Regulation (EU) No 2019/1021 (Stockholm Convention – persistent organic pollutants)
None.

EU - Substances Depleting the Ozone layer (1005/2009)
None.

German Water hazard classes (Wassergefährdungsklassen)
Not classified.

Other International Inventories
No information available.

Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16

Other information

This safety data sheet complies with the requirements COMMISSION REGULATION (EU) 2020/878.

Revision note

This SDS is valid from 01.03.2023.

Contact info@synthbioenzymes.com for latest revision.

Abbreviations and acronyms

°C – Degrees Celsius

ADR – European Agreement concerning the International Carriage of Dangerous Goods by Road.

CAS – Chemical Abstracts Service

EC number – European Community number

EU – European Union

IATA – International Air Transport Association

IMDG – International Maritime Dangerous Goods

Kow – Octanol-Water Partition Coefficient

PBT - Persistent, Bioaccumulative and Toxic

REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation

RID – European Agreement concerning the International Carriage of Dangerous Goods by Rail

SDS – Safety Data Sheet

UFI – Unique Formulation Identifier

UN – United Nations

vPvB - Very Persistent and Very Bioaccumulative

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge and belief at the date of publication. This information is intended only as a guide for safe handling, use, processing, storage, transportation, disposal and release. All materials and mixtures may present unknown hazards and should be used with caution. The information relates only to the specific material and may not be valid for such material used in combination with any other materials or in any process unless expressly specified in the text.

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