

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006/EG,
Article 31



GENAXXON

b i o s c i e n c e

Product number : M3003

Product name :

ReproFast proof reading polymerase

1. Identification of the substance/preparation and of the company

Product identifier

Product Name: ReproFast proof reading polymerase

Catalogue-No.: M3003

CAS Number:

EC Number:

REACH Registration Number: A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

No further relevant information available.

Application of the substance/the preparation

Laboratory chemical

Biochemistry

Molecular biology

Details of the supplier of the safety data sheet

Manufacturer /Supplier:

Genaxxon bioscience GmbH, Söflinger Str. 70, 89077 Ulm/Germany.

Tel.: +49 (0)731 3608 123, info@genaxxon.com

Further information available from: General Management

Emergency telephone number: +49 (0)731 3608 123 (Monday till Friday: 7:30 – 18:30 o'clock)

NOTE: If this product is a kit or supplied with more than one material, please refer to the MSDS for each component for hazard information.

Product Use:

This products are for laboratory research use only and are not intended for human or animal diagnostics, therapeutics or other clinical uses.

2. Hazards identification

Classification of the substance/preparation/mixture

Classification according to Regulation (EC) No 1272/2008

The substance is not classified according to the CLP regulation.

Classification according to European Directive 67/548/EEC or Directive 1999/45/EC.

Not applicable

Label elements

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labeled according to the CLP regulation.

Hazard pictograms: Void

Signal word: Void

Hazard statements: Void

Other hazards

Result of PBT and vPvB assessment

PBT: not applicable

vPvB: not applicable

3. Composition/information on ingredients

Chemical characterisation: Mixtures

Synonyms:

Formula: C₃H₈O₃ (of Glycerol)

Molecular Weight: 92.09 g/mol (of Glycerol)

Product name	CAS-No.	EC-No.	Index-No.	Classification	Concentration
ReproFast DNA Polymerase	9012-90-2				
Glycerol	56-81-5	200-289-5	---	---	<50%
Water	7732-18-5	231-791-2	---	---	<50%

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4. First-aid measures

Description of first aid measures

General information: No special measures required.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritations continues, consult a doctor.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

Seek medical treatment.

After swallowing:

Rinse out mouth. Make victim drink water (maximum of 2 drinking glasses).

If symptoms persist, consult a doctor.

Information for doctor:

Most important symptoms and effects, both acute and delayed: No further relevant information available.

Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing agents:

Carbon Dioxide (CO₂). Dry chemical powder, or appropriate foam. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture:

May be combustible at high temperature.

Ambient fire may liberate hazardous vapours.

In case of a fire, the following can be released:

Carbon oxides (CO, CO₂)

Advice for fire fighters:

Protective equipment:

Wear self-contained respiratory protective device.

Additional information:

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Contain escaping vapours with water.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid formation of dust.

Do not inhale dust.

Ensure adequate ventilation.

Use respiratory protective device against the effects of fumes/dust/aerosol.

Environmental precautions: No special measures required.

Methods and materials for containment and cleaning up:

Pick-up mechanically.

Avoid generation of dust.

Ensure adequate ventilation.

Clean up affected area.

Reference to other sections

No dangerous substances are released.

Additional information: None

7. Handling and storage

Handling

Precautions for safe handling:

No special precautions are necessary if used correctly.

Ensure good ventilation/exhaustion at the workplace.

Information about fire – and explosion protection:

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Keep ignition sources away – Do not smoke.
Protect from heat.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: Keep receptacles tightly sealed.
Store only in the original receptacle.

Information about storage in one common storage facility: No special measures required.

Further information about storage conditions:

Keep container tightly sealed.
Store in dry conditions in well closed receptacle.

Recommended storage temperature: -20°C

Storage class: 10-13

Specific end use(s): No further relevant information available.

8. Exposure controls / personal protection

Additional information about design of technical facilities: No further data; see item 7 of this data sheet.

Control parameters

Ingredients with limit values that require monitoring at the workplace: Not required.

Additional information: The lists valid during the making were used as basis.

Exposure controls:

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Avoid contact with eyes and skin.

Store protective clothing separately.

Immediately remove all soiled and contaminated clothing.

Respiratory protection: Respiratory protection required when vapours/aerosols are generated. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Filter P3 (EN 143).



Required when vapours/aerosols are generated

Protection of hands:



Protective gloves (EN 374)

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

For the permanent contact gloves made of the following materials are suitable:

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm

Value for permeation: Level: >480 min.

As protection from splashes gloves made of the following materials are suitable:

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm

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Value for the permeation: Level \geq 480 min.

Eye/face protection: Safety glasses .



Safety glasses (EN 166)

Body protection:

Use protective suit.

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled.

9. Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance

Form:	Liquid
Colour:	colourless
Odour:	Not determined
Odour threshold:	Not determined

pH value at 20°C: Not determined

Change in conditions

Melting point/Melting range:	Not determined
Boiling point/Boiling range:	Not determined

Flash point: Not applicable

Flammability (solid, gaseous): Product is not flammable

Ignition temperature: Not applicable

Decomposition temperature: Not determined

Self-ignition: Not applicable

Danger of explosion: Product does not present an explosion hazard.

Explosion limits:

Lower:	Not applicable
Upper:	Not applicable

Density (20°C): Not determined

Relative density Not determined

Vapour density Not determined

Evaporation rate Not determined

Solubility in / Miscibility with (water, 20°C):

Soluble

Viscosity:

Dynamic:	Not determined
Kinematic:	Not determined

Solvent content:

Organic solvents:	0.0%
VOC (EC)	0.00%

Other information: No further relevant information available.

10. Stability and reactivity

Reactivity

Chemical stability

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Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

Possibility of hazardous reactions: No dangerous reactions known.

Conditions to avoid: No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: In the event of fire: See chapter 5 of this data sheet.

11. Toxicological information

Information on toxicological effects

Acute toxicity:

LD50/LC50 values relevant for classification

Quantitative data on the toxicological effect of this product are not available.

Primary irritant effect

on the skin: No data available.

on the eye: No data available.

After inhalation: No data available.

Sensitization: No sensitizing effect known.

Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

The product should be handled with the care usual when dealing with chemicals.

The substance is not subject to classification according to the latest version of the EU lists.

12. Ecological Information

Toxicity

Aquatic toxicity: Quantitative data on the ecological effect of the product are not available.

Persistence and degradability: Easily biodegradable.

Behaviour in environmental systems

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Additional ecological information

General notes: Generally not hazardous for water.

Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

Other adverse effects: No further relevant information available.

13. Disposal considerations

Waste treatment methods

Recommendation:

Chemicals must be disposed of in compliance with the respective national regulations. Must not be disposed together with household garbage. Do not allow product to reach sewage system. Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations. Packagings that may not be cleansed are to be disposed of in the same manner as the product.

Recommended cleaning agents: Water, if necessary together with cleansing agents.

14. Transport information

UN-Number

ADR, IMDG, IATA

Void

UN proper shipping name

ADR, IMDG, IATA

Void

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Transport hazard class(es)

ADR, IMDG, IATA Void

Packaging group

ADR, IMDG, IATA Void

Special precautions for user Not applicable

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

Transport/Additional information: No dangerous according to the above specifications.

UN "Model Regulation": - - -

15. Regulatory information

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16. Other information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Genaxxon bioscience GmbH, shall not be held liable for any damage resulting from handling or from contact with the above product.

Disclaimer

This product is for R&D use only. Not for drug, household or other uses.

Abbreviation and Acronyms:

ACAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

CAS: Chemical Abstracts Service (division of the American Chemical Society)

EINECS: European Inventory of Existing Commercial Chemical Substances

GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

GHS: Globally Harmonized System of Classification and labeling of Chemicals

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

IMDG: International Maritime code for Dangerous Goods

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail).