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

Product number : M3185 / M3008

Product name :

DF Taq Polymerase S (DNA-free) / DF Taq Polymerase E (DNA-free)

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

Product identifier

Product Name: DF Tag Polymerase S (DNA-free) / DF Tag Polymerase E (DNA-free)

Catalogue-No.: M3185 and M3008

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) No1272/2008 The substance is not classified according to the CLP regulation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC: Not applicable

Label elements Labelling according to Regulation (EC) No. 1272/2008: Hazard pictograms: Signal word: Hazard statement(s): Other hazards Results of PBT and vPvB assessment PBT: Not applicable	Void Void Void Void
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
Taq DNA Polymerase	9012-90-2				
Glycerol	56-81-5	200-289-5			<50%
Water	7732-18-5	231-791-2			<50%

4. First-aid measures

Description of first aid measures

General information: No special measures required. After inhalation: Supply fresh air, consult a doctor in case of complaints. After skin contact: Wash off with plenty of water. If skin irritation continues, consult a doctor. After eye contact: Rinse opened eye for several minutes under running water.

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Seek medical treatment. After swallowing: Rinse out mouth and then drink water (not more than 2 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: Use fire extinguishing methods suitable to surrounding conditions. Special hazards arising from the substance or mixture: Ambient fire may liberate hazardous vapours. Advice for fire-fighters: None Protective equipment: Wear self-contained respiratory protective device. No special measures necessary. Additional information:

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

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Do not inhale steams/aerosols. Environmental precautions: Do not allow to enter sewers/ surface or ground water. Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Clean up affected area. Reference to other sections See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

Additional information: None

7. Handling and storage

Precautions for safe handling: No special precautions are necessary if used correctly. Information about fire - and explosion protection: No special measures required.

Conditions for safe storage, including any incompatibilities Storage: Requirements to be met by storerooms and receptacles: No special requirements. Information about storage in one common storage facility: No special measures required. Further information about storage conditions: Keep container tightly sealed. Recommended storage temperature: -20°C Storage class: 12

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: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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.

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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 resist ant 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: ≥0.11mm

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 Value for the permeation: Level ≥ 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:	characteristic	
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	
	Netensieshie	
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.	
Danger of explosion.		

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Explosion limits: Lower: Upper:	Not applicable Not applicable
Density (20°C):	Not determined
Relative density Vapour density Evaporation rate	Not determined Not determined Not determined
Solubility in / Miscibility with (water, 20°C):	Soluble
Viscosity: Dynamic: Kinematic:	Not determined Not determined
Solvent content: Organic solvents: VOC (EC)	0.0% 0.00%
Other information:	No further relevant information available.

10. Stability and reactivity

Reactivity

Chemical stability

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

Skin corrosion/irritation: Based on available data, the classification criteria are not met. Serious eye damage/irritation: Based on available data, the classification criteria are not met. After inhalation: No irritant effect. Respiratory or skin sensitisation: Based on available data, the classification criteria are not met. CMR effects (carcinogenity, mutagenicity and toxicity for reproduction) Germ cell mutagenicity: Based on available data, the classification criteria are not met. Carcinogenicity: Based on available data, the classification criteria are not met. Reproductive toxicity: Based on available data, the classification criteria are not met. STOT-single exposure: Based on available data, the classification criteria are not met. STOT-repeated exposure: Based on available data, the classification criteria are not met. Aspiration hazard: Based on available data, the classification criteria are not met.

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.

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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
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 Anne of MARPOL73/78 and the IBC Code	x II Not applicable
Transport/Additional information:	No dangerous according to the above specifications.
UN "Model Regulation":	Void-

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.

Abbreviations 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).

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