

Safety data sheet

According to Regulation (EC) No. 1907/2006

PCR Buffer 12

Version: V1.0
Replaced version: -

Release Date: 06.07.2026
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SECTION 1: Identification of the substance / mixture and of the company / undertaking

1.1 Product identifiers

Product name: PCR Buffer 12
Article number: ZP000007, ZP000009

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

Identified uses:
Laboratory chemicals

Uses advised against
No further relevant information available.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: BIOTYPE GmbH
Address: Moritzburger Weg 67
01109 DRESDEN
GERMANY

Telephone: +49 351 8838 400
Mail: sds@biotype.de

1.4 Emergency telephone

BIOTYPE GmbH
8 a.m. to 6 p.m.; mon-fri,
consultation in English and German
+49 351 8838 3038

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008

This product does not meet the classification criteria according to Regulation (EC) No 1272/2008 (CLP). However, a safety data sheet is provided because an occupational exposure limit has been established in some countries.

The main adverse physicochemical effects, effects on human health and the environment

Spilling and extinguishing water can lead to environmental pollution of water bodies.

2.2 Label elements

Classification according to Regulation (EC) No. 1272/2008

This product does not meet the classification criteria according to Regulation (EC) No 1272/2008 (CLP). Therefore it does not need to be labeled accordingly.

Hazard pictograms

Not applicable

Signal word

Not applicable

Hazard-determining components of labelling

Not applicable

Hazard statements

Not applicable

Precautionary statements

Not applicable

2.3 Other hazards

This mixture contains no PBT-/vPvB-substance at a concentration of ≥ 0.1 %.

This mixture contains no PMT-/vPvM-substance at a concentration of ≥ 0.1 %.

This mixture contains no endocrine disruptor at a concentration of ≥ 0.1 %.

SECTION 3: Composition / information on ingredients

3.1 Substances

This product is a mixture.

3.2 Mixtures

Chemical characterization

Substance name:	Glycerin
Concentration:	0.1 – $\leq$ 1.0 %
CAS-No.:	56-81-5
EC-No.:	200-289-5
Index-No.:	Not applicable
REACH Registration No.:	01-2119471987-18-xxxx

Classification according to GHS	Not applicable
Exposure limit:	Substance for which exposure limits have been established in some countries
SVHC*:	no
Specific concentration limits	none
M-Factor (acute)	no
M-Factor (chronic)	no
Note	no
Substance name:	Dimethyl sulfoxide
Concentration:	5.0 – ≤ 20.0 %
CAS-No.:	67-68-5
EC-No.:	200-664-3
Index-No.:	Not applicable
REACH Registration No.:	01-2119431362-50-xxxx
Classification according to GHS	Not applicable
Exposure limit:	Substance for which exposure limits have been established in some countries
SVHC*:	no
Specific concentration limits	none
M-Factor (acute)	no
M-Factor (chronic)	no
Note	no

*Substance of Very High Concern (SVHC): Substance that meets the criteria of Article 57 and is therefore considered for inclusion in Annex XIV

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Self-protection of the first aider.

Do not leave affected persons unattended.

If health problems occur, seek medical advice (show this label or safety data sheet if possible).

Following inhalation

Supply fresh air.

Seek medical advice if symptoms occur or in case of doubt.

Following skin contact

Wash skin with water and soap.

Seek medical advice if symptoms occur or in case of doubt.

Following eye contact

Remove contact lenses.

Protect uninjured eye.

Flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart.

Seek medical advice if symptoms occur or in case of doubt.

Following ingestion

Rinse mouth.

Never give anything by mouth to an unconscious person.

Seek medical advice if symptoms occur or in case of doubt.

4.2 Most important symptoms and effects, both acute and delayed

The main symptoms are described in sections 2.2 and 11.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media**Suitable extinguishing agents**

CO₂, powder, or water spray. Fight larger fires with water spray or alcohol resistant foam. Adapt fire-fighting measures to the surrounding area.

Due to safety reasons unsuitable extinguishing agents

Water with full jet.

5.2 Special hazards arising from the substance or mixture

The product is not flammable.

Combustion gases and vapors may form when heated or in case of fire.

5.3 Advice for firefighters

Wear self-contained breathing apparatus.

In case of fire and/or explosion do not breathe fumes.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures**For non-emergency personnel**

Ensure adequate ventilation.

Clear the endangered area and warn those around you.

Proceed according to emergency plan.

Call in experts.

Avoid contact with substance. Avoid breathing dust / fume / gas / mist / vapours / aerosol.

Wear protective clothing.

For emergency responders

Wear protective clothing.

6.2 Environmental precautions

Do not allow product to reach sewage system or any water course.

6.3 Methods and material for containment and cleanup

Absorb liquid components with liquid-binding material.
Place into appropriate containers for disposal.

6.4 Reference to other sections

Firefighting measures see section 5.
Handling and storage see section 7.
Personal protective equipment see section 8.
Disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Personal protective equipment see section 8.

Keep away from high temperature sources and ignition sources.
When working with the mixture, avoid contact with skin and eyes.
Ensure adequate ventilation.
Open and handle container with caution.
Do not inhale product vapors or aerosols.
Do not eat, drink or smoke while in use.
Wash hands during breaks and after work.
Avoid release into the environment.
Thoroughly clean contaminated surfaces.

7.2 Conditions for safe storage, including any incompatibilities

Specific designs for storage rooms or vessels

Keep only in original container.
Store container in a dry, cool, and well-ventilated place.
Keep container tightly closed.

Recommended storage temperature: -25 °C to -15 °C

Hints for combined storage

Store separately from food.
Store separately from oxidizing agents.

7.3 Specific end use

Laboratory chemical, use only according to the product information.

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Components with workplace-related, monitored limit values

- Glycerin (CAS-Nummer: 56-81-5)

Australia	TWA: 10 mg/m ³ , the value for inhalable dust containing, no asbestos and less than 1% free silica.
Belgium	TWA: 10 mg/m ³
Canada	TWA: 10 mg/m ³
Finland	TWA: 20 mg/m ³
France	TWA: 10 mg/m ³
Germany	AGW: 200 mg/m ³ E, 2 (I), Y, DFG (2016), TRGS 900
Great Britain and Northern Ireland	TWA: 10 mg/m ³
Ireland	TWA: 10 mg/m ³
New Zealand	TWA: 10 mg/m ³ , the value for inhalable dust containing, no asbestos and less than 1% free silica.
Poland	TWA: 10 mg/m ³ , Inhalable fraction
Singapore	TWA: 10 mg/m ³
South Korea	TWA: 10 mg/m ³
Spain	TWA: 10 mg/m ³
Switzerland	TWA: 50 mg/m ³ , inhalable STEL: 100 mg/m ³ , inhalable
United States of America	TWA: 5 mg/m ³ , Respirable fraction TWA: 15 mg/m ³ , Inhalable fraction

- Dimethyl sulfoxide (CAS-Nummer: 67-68-5)

Austria	TWA: 160 mg/m ³ , 50 ml/m ³
Denmark	TWA: 160 mg/m ³ , 50 ml/m ³ STEL: 320 mg/m ³ , 100 ml/m ³
Finland	TWA: 50 mg/m ³
Germany	AGW: 160 mg/m ³ , 50 ml/m ³ , 2 (I), H, Z, DFG (2016), TRGS 900
Sweden	TWA: 150 mg/m ³ , 50 ml/m ³ STEL: 500 mg/m ³ , 150 ml/m ³ , 15 minutes average value

Switzerland

TWA: 160 mg/m³, 50 ml/m³
 STEL: 320 mg/m³, 100 ml/m³

8.2 Exposure controls / personal protection

Suitable technical control equipment

Good ventilation of the work area should be ensured.

Personal protective equipment

Respiratory protection

Under intended use conditions, no protective equipment is required.

Protection of hands

Wear suitable protective gloves. Chemical protection gloves tested in accordance with EN 374 are suitable. Check for leaks/impermeability before use. It is recommended to clarify the chemical resistance of the protective gloves mentioned above for special applications with the glove manufacturer. The times given are guide values from measurements at 22 °C and permanent contact. Increased temperatures due to heated substances, body heat, etc. and a reduction in the effective layer thickness due to stretching can lead to a significant reduction in the breakthrough time. If in doubt, contact the manufacturer. If the layer thickness is approx. 1.5 times greater/smaller, the respective breakthrough time is doubled/halved. The data only applies to the pure substance. When applied to mixtures of substances, they may only be regarded as a guide.

Full contact:

Material of gloves:	Nitrile rubber
Recommended thickness of the material:	≥ 0.1 mm
Value for the permeation:	Level ≥ 480 min

Dripping:

Material of gloves:	Nitrile rubber
Recommended thickness of the material:	≥ 0.1 mm
Value for the permeation:	Level ≥ 480 min

Other protective measures:

Allow recovery periods for the skin to regenerate. Preventive skin protection (protective creams / ointments) is recommended.

Eye/face protection

Use safety glasses with side protection.

Limitation and monitoring of environmental exposure

Prevent penetration into the sewer system or into surface and groundwater.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	liquid
Color	colorless
Odor	no odor detectable
Odor threshold	no odor detectable
Melting point/freezing point	not applicable
Initial boiling point and boiling range	not applicable
Decomposition temperature	not applicable
Flash point	not applicable

Flammability	not applicable	
Ignition temperature	not applicable	
Upper explosion limit	not applicable	
Lower explosion limit	not applicable	
pH-value	not applicable	
Kinematic viscosity	not applicable	
Dynamic viscosity	not applicable	
Density	not applicable	
Relative vapor density	not applicable	
Solubility	in water	
Partition coefficient	not applicable	
n-octanol/water (log value)		
Vapor pressure	not applicable	
Particle characteristics	not applicable	liquid

9.2 Other information

No explosive properties
No oxidizing properties

SECTION 10: Stability and reactivity

10.1 Reactivity

Substance/mixture is not reactive under normal environmental conditions.

10.2 Chemical stability

Substance/mixture is stable under recommended storage and use conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions are known.

10.4 Conditions to avoid

No specific conditions to avoid are known.

10.5 Incompatible materials

No specific materials to avoid are known.

10.6 Hazardous decomposition products

No hazardous decomposition products are known.
Hazardous combustion products: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

ATE _{mix} (oral)	no classification
ATE _{mix} (dermal)	no classification
ATE _{mix} (inhalation)	no classification

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.

Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

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.

Specific target organ toxicity at single exposure

Based on available data, the classification criteria are not met.

Specific target organ toxicity on repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2 Information on other hazards**Endocrine disrupting properties**

This mixture contains no endocrine disruptor at a concentration of $\geq 0.1\%$.

Handle in accordance with normal precautions when dealing with chemicals.

SECTION 12: Ecological information

12.1 Toxicity**Aquatic toxicity**

Slightly hazardous to water

Avoid release to the environment.

Non-aquatic toxicity

No information available on exact toxicity.

Avoid release to the environment.

12.2 Persistence and degradability

No further relevant information available.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

12.5 Results of PBT, vPvB, PMT and vPvM assessment

This mixture contains no PBT-/vPvB-substance at a concentration of $\geq 0.1\%$.
This mixture contains no PMT-/vPvM-substance at a concentration of $\geq 0.1\%$.

12.6 Endocrine disrupting properties

This mixture contains no endocrine disruptor at a concentration of $\geq 0.1\%$.

12.7 Other adverse effects

Release into the environment must be avoided.

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

Do not dispose of product via wastewater. Do not allow product to enter drains. Do not dispose of with household waste.

Dispose of contents / container in accordance with local / regional / national / international regulations.

Take empty containers to an approved waste disposal facility for recycling or disposal.

SECTION 14: Transport information**14.1 UN-Number**

Not regulated

14.2 UN proper shipping name

Not regulated

14.3 Transport hazard class(es)

Not regulated

14.4 Packing group

Not regulated

14.5 Environmental hazards

Not environmentally hazardous according to dangerous goods regulations

14.6 Special precautions for user

No special precautions for user known.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Not transported as bulk goods

SECTION 15: Regulatory information

15.1 Safety. Health and environmental regulations / legislation specific for the substance or mixture

EU-Regulations

Regulation (EC) No 1907/2006 Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

Assessment has been made.

Authorizations according to Title VII of Regulation (EC) No 1907/2006 (REACH) in Annex XIV

No authorizations necessary.

Restrictions according to Title VIII of Regulation (EC) No 1907/2006 (REACH) with entries in Annex XVII

No restrictions to consider.

Regulation (EC) No 1272/2008 Classification, labelling and packaging of substances and mixtures

Assessment has been made.

Regulation (EU) 2018/1881 Amending Regulation (EC) No 1907/2006 as regards Annexes I, III, VI, VII, VIII, IX, X, XI, and XII to address nanoforms of substances

Not applicable

Regulation (EU) 2020/878 Amending Annex II to Regulation (EC) No 1907/2006

Requirements have been applied

Regulation (EU) No 528/2012 Making available on the market and use of biocidal products

Not applicable

Regulation (EU) 2019/1021 Persistent organic pollutants

Not applicable

Regulation (EC) No 1005/2009 Substances that deplete the ozone layer

Not applicable

Regulation (EU) No 649/2012 Export and import of hazardous chemicals

Not applicable

Regulation (EC) No 648/2004 Detergents

Not applicable

Regulation (EU) No 517/2014 Fluorinated greenhouse gases

Not applicable

National regulation

This safety data sheet was created in accordance with EU regulations, which form the basis for the national law of the member states.

15.2 Chemical safety assessment

A chemical safety assessment was not required.

SECTION 16: Other information

Changes compared to the last version

Initial universal version

Abbreviations and acronyms

ATE	Acute Toxicity Estimates
CAS	Chemical Abstracts Service; assigns a unique identifier for chemical substances (CAS numbers)
CLP	Classification, Labelling and Packaging
EC	European Commission
EN	European Norm
EU	European Union
GHS	Globally Harmonized System
IBC	Intermediate Bulk Container
MARPOL	International Convention for the Prevention of Pollution from Ships
PBT	Persistent, Bioaccumulative and Toxic
PMT	Persistent, Mobile and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
STEL	Short-Term Exposure Limit
SVHC	Substance of Very High Concern
TWA	Time-Weighted Average
UN	United Nations
vPvB	Very Persistent and Very Bioaccumulative
vPvM	Very Persistent and Very Mobile

References and data sources

- Regulation (EC) No 1907/2006 Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- Regulation (EC) No 1272/2008 Classification, labelling and packaging of substances and mixtures
- Agreement concerning the International Carriage of Dangerous Goods by Road (ADR).
- Regulations concerning the International Carriage of Dangerous Goods by Rail (RID).
- International Maritime Dangerous Goods Code (IMDG).
- Dangerous Goods Regulations (DGR) for the air transport (IATA).
- <https://ilv.ifa.dguv.de/substances>
- <http://echa.europa.eu/en/candidate-list-table>