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# Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

# SECTION 1: Identification of the substance/mixture and of the company/ undertaking

#### **1.1. Product identifier** Trade name/designation:

10x Extraction Buffer

#### Article No.:

PCR-396, PCR-397, PCR-528, PCR-529, PCR-530, PCR-531, PCR-532, PCR-533, PCR-534, PCR-701, PCR-702

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

#### Use of the substance/mixture:

laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals

## \* 1.3. Details of the supplier of the safety data sheet

#### Supplier (manufacturer/importer/only representative/downstream user/distributor):

Jena Bioscience GmbH Löbstedter Straße 71 07749 Jena Germany Telephone: 0049-3641-6285000 E-mail: info@jenabioscience.com Website: www.jenabioscience.com

**E-mail (competent person):** info@jenabioscience.com Office hours from 8 till 16 o'clock

#### 1.4. Emergency telephone number

Mitarbeiter Jena Bioscience GmbH, 0049-3641-6285000 (Only available during office hours.)

#### **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Skin corrosion/irritation (Skin Corr. 1)	H314: Causes severe skin burns and eye damage.	Calculation method.
Serious eye damage/eye irritation (Eye Dam. 1)	H318: Causes serious eye damage.	Calculation method.

#### \* 2.2. Label elements

# Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms:



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#### Hazard components for labelling:

#### potassium hydroxide

Hazard statements for health hazards

H314 Causes severe skin burns and eye damage.

#### Supplemental hazard information: none

Precautionary statements Prevention

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/
--

#### Precautionary statements Response

P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present
	and easy to do. Continue rinsing.
P363	Wash contaminated clothing before reuse.

# Precautionary statements Storage

Store locked up.

#### 2.3. Other hazards

No data available

P405

#### SECTION 3: Composition/information on ingredients

## 3.2. Mixtures

#### Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 1310-58-3 EC No.: 215-181-3 Index No.: 019-002-00-8	<b>potassium hydroxide</b> Acute Tox. 4 (H302), Skin Corr. 1A (H314) O Danger <b>Specific concentration limit (SCL)</b> Skin Corr. 1A; H314: $C \ge 5\%$ Skin Corr. 1B; H314: $2\% \le C < 5\%$ Skin Irrit. 2; H315: $0.5\% \le C < 2\%$ Eye Dam. 1; H318: $C \ge 2\%$ Eye Irrit. 2; H319: $0.5\% \le C < 2\%$	1 - < 2.25 weight-%

Full text of H- and EUH-phrases: see section 16.

# SECTION 4: First aid measures

#### 4.1. Description of first aid measures

#### General information:

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove victim out of the danger area. Remove contaminated, saturated clothing. If unconscious but breathing normally, place in recovery position and seek medical advice. Do not leave affected person unattended. Warning First aider: Pay attention to self-protection!

#### Following inhalation:

Provide fresh air. In case of respiratory tract irritation, consult a physician.

#### In case of skin contact:

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing. Get immediate medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention.

#### After eye contact:

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

#### Following ingestion:

Rinse mouth. Let 1 glass of water be drunken in little sips (dilution effect). Get medical advice/attention if you feel unwell. Rinse mouth immediately and drink 1 glass of of water. Do NOT induce vomiting. Get immediate medical advice/attention.

#### Self-protection of the first aider:

Use personal protection equipment.

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#### **4.2. Most important symptoms and effects, both acute and delayed** Skin corrosion/irritation Serious eye damage/eye irritation

**4.3. Indication of any immediate medical attention and special treatment needed** Treat symptomatically.

# SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

#### Suitable extinguishing media:

Co-ordinate fire-fighting measures to the fire surroundings.

#### 5.2. Special hazards arising from the substance or mixture

The product itself does not burn.

#### Hazardous combustion products:

In case of fire: Gases/vapours, toxic

#### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

#### 5.4. Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

#### SECTION 6: Accidental release measures

## 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

# Personal precautions:

Remove persons to safety.

#### Protective equipment:

Wear protective gloves/protective clothing/eye protection/face protection.

#### 6.1.2. For emergency responders

#### Personal protection equipment:

Personal protection equipment: see section 8

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

# 6.3. Methods and material for containment and cleaning up

#### For containment:

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

#### **6.4. Reference to other sections**

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

#### 6.5. Additional information

Use appropriate container to avoid environmental contamination.

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

#### **Protective measures**

#### Advices on safe handling:

Wear personal protection equipment (refer to section 8).

#### Fire prevent measures:

\*

No special measures are necessary.

#### Advices on general occupational hygiene

When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes.

# 7.2. Conditions for safe storage, including any incompatibilities

#### Technical measures and storage conditions:

Keep container tightly closed in a cool, well-ventilated place.

Storage class (TRGS 510, Germany): 8B – Non-combustible corrosive substances

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#### 7.3. Specific end use(s)

No data available

## **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

8.1.1. Occupational exposure limit values

#### No data available

#### 8.1.2. Biological limit values

No data available

#### 8.1.3. DNEL-/PNEC-values

Substance name	<ol> <li>DNEL type</li> <li>Exposure route</li> </ol>
<b>potassium hydroxide</b> CAS No.: 1310-58-3 EC No.: 215-181-3	<ol> <li>DNEL worker</li> <li>Long-term - inhalation, local effects</li> </ol>

#### **8.2. Exposure controls**

#### 8.2.1. Appropriate engineering controls

No data available

#### 8.2.2. Personal protection equipment

#### Eye/face protection:

Eye glasses with side protection EN 166

#### Skin protection:

Tested protective gloves must be worn EN ISO 374 Suitable material: Breakthrough time: min In the case of wanting to use the gloves again, clean them before taking off and air them well. Breakthrough times and swelling properties of the material must be taken into consideration.

#### 8.2.3. Environmental exposure controls

No data available

#### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

#### **Appearance**

**Physical state:** Liquid **Odour:** not determined

Colour: not determined

#### Safety relevant basis data

Parameter	Value	1 Method	
		<ul><li>Remark</li></ul>	
рН	No data available		
Melting point	No data available		
Freezing point	No data available		
Initial boiling point and boiling range	No data available		
Flash point	not applicable		
Evaporation rate	No data available		
Auto-ignition temperature	not applicable		
Upper/lower flammability or explosive limits	No data available		
Vapour pressure	No data available		
Vapour density	No data available		
Density	No data available		
Bulk density	not applicable		
Water solubility	No data available		
Dynamic viscosity	No data available		
Kinematic viscosity	No data available		

#### 9.2. Other information

No data available

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# SECTION 10: Stability and reactivity

#### **10.1. Reactivity**

The product itself does not burn.

# 10.2. Chemical stability

No data available

#### 10.3. Possibility of hazardous reactions No data available

# 10.4. Conditions to avoid

No data available

#### 10.5. Incompatible materials

No data available

#### 10.6. Hazardous decomposition products

In case of fire: Gases/vapours, toxic

## **SECTION 11: Toxicological information**

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

potassium hydroxide CAS No.: 1310-58-3 EC No.: 215-181-3
LD <sub>50</sub> oral: 333 mg/kg (Rat)
Acute oral toxicity:
Based on available data, the classification criteria are not met. Acute dermal toxicity:
Based on available data, the classification criteria are not met.
Acute inhalation toxicity:
Based on available data, the classification criteria are not met.
Skin corrosion/irritation:
Causes severe skin burns and eye damage.
Serious eye damage/irritation:
Causes serious eye damage.
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.
<b>Carcinogenicity:</b> 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.
Additional information:
No data available
11.2. Information on other hazards
No data available
SECTION 12: Ecological information
12.1. Toxicity
potassium hydroxide CAS No.: 1310-58-3 EC No.: 215-181-3
<b>LC<sub>50</sub>:</b> 80 mg/L 4 d (fish, Gambusia affinis (Mosquito fish))

#### 12.2. Persistence and degradability No data available

#### Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) 10x Extraction Buffer Revision date: 26 Mar 2024 Version: 2 Print date: 26 Mar 2024 12.3. Bioaccumulative potential No data available 12.4. Mobility in soil No data available 12.5. Results of PBT and vPvB assessment potassium hydroxide CAS No.: 1310-58-3 EC No.: 215-181-3 Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. 12.6. Endocrine disrupting properties No data available 12.7. Other adverse effects No data available **SECTION 13: Disposal considerations** 13.1. Waste treatment methods Waste treatment options **Appropriate disposal / Product:** Consult the appropriate local waste disposal expert about waste disposal. SECTION 14: Transport information Land transport (ADR/RID) Inland waterway craft Sea transport (IMDG) Air transport (ICAO-TI / IATA-DGR) (ADN) \* 14.1. UN number or ID number UN 1814 UN 1814 UN 1814 UN 1814 14.2. UN proper shipping name POTASSIUM HYDROXIDE POTASSIUM HYDROXIDE POTASSIUM HYDROXIDE POTASSIUM HYDROXIDE SOLUTION SOLUTION SOLUTION SOLUTION 14.3. Transport hazard class(es) 8 8 \* 14.4. Packing group Ш П Ш 14.5. Environmental hazards No No No No \* 14.6. Special precautions for user Special Provisions: Limited quantity (LQ): Limited quantity (LQ): **Special Provisions:** 1 L 1 L Α3 **Excepted Quantities Excepted Quantities** Limited quantity (LQ): Limited quantity (LQ): (EQ): (EQ): Y840 1 L F2 F2 **Excepted Quantities Excepted Quantities Classification code:** Hazard identification (EQ): (EQ): number (Kemler No.): E2 E2 C5 80 EmS-No.: **Classification code:** F-A. S-B C5 **Tunnel restriction code:** (E) 14.7. Maritime transport in bulk according to IMO instruments No data available

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# **SECTION 15: Regulatory information**

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

#### 15.1.1. EU legislation

No data available

# 15.1.2. National regulations

#### [DE] National regulations

#### Water hazard class

WGK:

1 - slightly hazardous to water

# 15.2. Chemical Safety Assessment

No data available

# **SECTION 16: Other information**

#### \* 16.1. Indication of changes

Details of the supplier of the safety data sheet 1.3.

#### 2.2. Label elements

- 7.2. Conditions for safe storage, including any incompatibilities
- 14.1. UN number or ID number
- UN proper shipping name 14.2.
- 14.4. Packing group

#### 14.6. Special precautions for user

16.1. Indication of changes

16.2. Abbreviations and acronyms

#### \* 16.2. Abbreviations and acronyms

- ACGIH American Conference of Governmental Industrial Hygienists
- ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- European Agreement concerning the International Carriage of Dangerous Goods by Road ADR
- CAS **Chemical Abstracts Service**
- CLP Classification, Labelling and Packaging
- German Institute for Standardization / German Industrial Standard DIN
- derived no-effect level DNEL
- European Standard ΕN
- Exposure scenario ES
- International Civil Aviation Organization **ICAO**
- International Maritime Dangerous Goods IMDG
- International Maritime Organization IMO
- ISO International Standards Organisation
- $LC_{50}$ Lethal (fatal) Concentration 50%
- Lethal (fatal) Dose 50% LD<sub>50</sub>
- Maximum concentration in the workplace air (CH) MAK
- NFPA National Fire Protection Association
- NIOSH National Institute for Occupational Safety & Health
- persistent and bioaccumulative and toxic PBT
- PNEC Predicted No Effect Concentration
- REACH Registration, Evaluation and Authorization of Chemicals
- RID Dangerous goods regulations for transport by rail
- SCL Specific concentration limit
- TRGS Technische Regeln für Gefahrstoffe
- UN United Nations

# 16.3. Key literature references and sources for data

No data available

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# 16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

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Skin corrosion/irritation (Skin Corr. 1)	H314: Causes severe skin burns and eye damage.	Calculation method.
Serious eye damage/eye irritation (Eye Dam. 1)	H318: Causes serious eye damage.	Calculation method.

# 16.5. List of relevant hazard statements and/or precautionary statements from sections 2 to 15

Hazard statements		
H302	Harmful if swallowed.	
H314	Causes severe skin burns and eye damage.	
H315	Causes skin irritation.	
H318	Causes serious eye damage.	
H319	Causes serious eye irritation.	

# 16.6. Training advice

No data available

# 16.7. Additional information

No data available

\* Data changed compared with the previous version.