according to Regulation (EC) No 1907/2006

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

1.1. Product identifier

Dye removal column

Further trade names CY-LK-R1-1, CY-LK-R2-1

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

Use of the substance/mixture

laboratory reagent. Research and Development.

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

| Company name: | Dynamic Biosensors GmbH |
|--------------------------|----------------------------------------------------------------|
| Street: | Perchtinger Str. 8/10 |
| Place: | D-81379 München |
| Telephone: | +49-89-8974544-0 |
| 1.4. Emergency telephone | Emergency CONTACT (24-Hour-Number): GBK GmbH +49 (0)6132-84463 |
| number: | |

Further Information

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

2.2. Label elements

Additional advice on labelling

Labelling according to Regulation (EC) No. 1272/2008 [CLP]: none

2.3. Other hazards

The substances in the mixture (> 0.1%) do not meet the PBT/vPvB criteria according to REACH, annex XIII. This product does not contain a substance (> 0,1%) that has endocrine disrupting properties with respect to humans as no components meets the criteria. This product does not contain a substance (> 0,1 %) that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria. No risks worthy of mention. Please observe the information on the safety data sheet at all times.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

The product does not contain dangerous substances according to REGULATION (EU) No. 2020/878, Annex II, Part A, 3.1/3.2. that must be mentioned in Chapter 3.

Relevant ingredients

none (according to Regulation (EC) No 1907/2006 (REACH))

Further Information

Product does not contain listed SVHC substances > 0.1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH).

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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).

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician.

After contact with skin

Gently wash with plenty of soap and water. In case of skin irritation, seek medical treatment.

After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed

See sections 2 and 11

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

Carbon dioxide (CO2). Dry extinguishing powder. Alcohol resistant foam. Atomized water.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO2).

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Safe handling: see section 7

For non-emergency personnel

Wear personal protection equipment (refer to section 8).

For emergency responders

No special measures are necessary.

6.2. Environmental precautions

Discharge into the environment must be avoided.

6.3. Methods and material for containment and cleaning up



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For containment

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

For cleaning up

Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Wear suitable protective clothing. (See section 8.)

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Always close containers tightly after the removal of product. When using do not eat, drink or smoke. Wash hands before breaks and after work.

Further information on handling

General protection and hygiene measures: See section 8.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

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

Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances. Infectious substances. Food and animal feedingstuff.

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity. Recommended storage temperature: 20 °C Protect against: frost. UV-radiation/sunlight. heat. Humidity

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Provide adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses; chemical goggles (if splashing is possible). EN ISO 16321-1:2022

Hand protection

In case of prolonged or frequently repeated skin contact:

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Wear suitable gloves. Suitable material: FKM (fluororubber). - Thickness of glove material: 0,4 mm Breakthrough time >= 8 h Butyl rubber. - Thickness of glove material: 0,5 mm Breakthrough time >= 8 h CR (polychloroprenes, Chloroprene rubber). - Thickness of glove material: 0,5 mm Breakthrough time >= 8 h NBR (Nitrile rubber). - Thickness of glove material: 0,35 mm Breakthrough time >= 8 h PVC (Polyvinyl chloride). - Thickness of glove material: 0,5 mm Breakthrough time >= 8 h The selected protective gloves have to satisfy the specifications of EU Directive EC/2016/425 and the standard EN 374 derived from it. Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Suitable protective clothing: Lab apron.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Thermal hazards

No special precautionary measures are necessary.

Environmental exposure controls

No special precautionary measures are necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical state: | liquid | |
|--------------------------------------------|--------------------|----------------|
| Colour: | white | |
| Odour: | No data available. | |
| Odour threshold: | not determined | |
| Melting point/freezing point: | | not determined |
| Boiling point or initial boiling point and | | not determined |
| boiling range: | | |
| Flammability: | | not determined |
| Lower explosion limits: | | not determined |
| Upper explosion limits: | | not determined |
| Flash point: | | not determined |
| Auto-ignition temperature: | | not determined |
| Decomposition temperature: | | not relevant |
| pH-Value: | | not determined |
| Viscosity / kinematic: | | not determined |
| Water solubility: | | not determined |
| Solubility in other solvents | | |
| not determined | | |
| Dissolution rate: | | not relevant |
| Partition coefficient n-octanol/water: | | not relevant |
| Dispersion stability: | | not relevant |
| Vapour pressure: | | not determined |
| Density: | | not determined |
| Bulk density: | | not relevant |
| Relative vapour density: | | not determined |
| | | |



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| Particle characteristics: | not relevant | |
| 2. Other information | | |
| Information with regard to physical | hazard classes | |
| Explosive properties | | |
| none | | |
| Sustaining combustion: | Not sustaining combustion | |
| Self-ignition temperature | | |
| Solid: | not relevant | |
| Gas: | not relevant | |
| Oxidizing properties | | |
| none | | |
| Other safety characteristics | | |
| Evaporation rate: | not determined | |
| Solvent separation test: | not determined | |
| Solvent content: | not determined | |
| Solid content: | not determined | |
| Sublimation point: | not relevant | |
| Softening point: | not relevant | |
| Pour point: | not relevant | |
| Viscosity / dynamic: | not determined | |
| Flow time: | not determined | |
| Further Information | | |
| No information available. | | |

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

Refer to section 10.5.

10.4. Conditions to avoid

Protect against: UV-radiation/sunlight. heat.

10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong. Reducing agents, strong.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11: Toxicological information

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

Acute toxicity

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

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

Irritation and corrosivity

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

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Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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.

Specific effects in experiment on an animal

No data available.

11.2. Information on other hazards

Endocrine disrupting properties

This product does not contain a substance (> 0,1%) that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Other information

No data available.

SECTION 12: Ecological information

12.1. Toxicity

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

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII. The aforementioned statement applies to substances contained in the product with a minimum content of 0.1%.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

The aforementioned statement applies to substances contained in the product with a minimum content of 0.1%.

12.7. Other adverse effects

No data available.

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled.

According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must



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be carried out in a specific way for every industry and process. Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

List of Wastes Code - contaminated packaging

150106 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); mixed packaging

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

No dangerous good in sense of these transport regulations. 14.1. UN number or ID number: 14.2. UN proper shipping name: No dangerous good in sense of these transport regulations. 14.3. Transport hazard class(es): No dangerous good in sense of these transport regulations. 14.4. Packing group: No dangerous good in sense of these transport regulations. Inland waterways transport (ADN) No dangerous good in sense of these transport regulations. 14.1. UN number or ID number: 14.2. UN proper shipping name: No dangerous good in sense of these transport regulations. 14.3. Transport hazard class(es): No dangerous good in sense of these transport regulations. 14.4. Packing group: No dangerous good in sense of these transport regulations. Marine transport (IMDG) 14.1. UN number or ID number: No dangerous good in sense of these transport regulations. 14.2. UN proper shipping name: No dangerous good in sense of these transport regulations. No dangerous good in sense of these transport regulations. 14.3. Transport hazard class(es): 14.4. Packing group: No dangerous good in sense of this transport regulation. Air transport (ICAO-TI/IATA-DGR) 14.1. UN number or ID number: No dangerous good in sense of these transport regulations. No dangerous good in sense of these transport regulations. 14.2. UN proper shipping name: 14.3. Transport hazard class(es): No dangerous good in sense of these transport regulations. 14.4. Packing group: No dangerous good in sense of this transport regulation. 14.5. Environmental hazards ENVIRONMENTALLY HAZARDOUS: No 14.6. Special precautions for user refer to section 6 - 8 14.7. Maritime transport in bulk according to IMO instruments not relevant **SECTION 15: Regulatory information** 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture EU regulatory information

| Directive 2010/75/EU on industrial emissions: | not determined |
|----------------------------------------------------------------|----------------------------------------|
| Directive 2004/42/EC on VOC in paints and varnishes: | not determined |
| Information according to Directive 2012/18/EU (SEVESO III): | Not subject to 2012/18/EU (SEVESO III) |

Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No 2020/878) This mixture is classified as not hazardous according to Regulation (EC) 1272/2008 [CLP].

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REACH 1907/2006 Appendix XVII, No (mixture): not relevant

National regulatory information

1 - slightly hazardous to water

15.2. Chemical safety assessment

Water hazard class (D):

For the following substances of this mixture a chemical safety assessment has been carried out:

SECTION 16: Other information

Changes

Rev. 1,0; Initial release: 23.05.2023

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) AGW: Arbeitsplatzgrenzwert CAS: Chemical Abstracts Service CLP: Classification, Labelling and Packaging of substances and mixtures DNEL: Derived No Effect Level d: dav(s) EINECS: European INventory of Existing Commercial chemical Substances ELINCS: European LIst of Notified Chemical Substances ECHA: European Chemicals Agency EWC: European Waste Catalogue IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO) GHS: Globally Harmonized System of Classification and Labelling of Chemicals GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany) h: hour LOAEL: Lowest observed adverse effect level LOAEC: Lowest observed adverse effect concentration LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent NOAEL: No observed adverse effect level NOAEC: No observed adverse effect concentration NLP: No-Longer Polymers N/A: not applicable OECD: Organisation for Economic Co-operation and Development PNEC: predicted no effect concentration PBT: Persistent bioaccumulative toxic RID: Reglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) REACH: Registration, Evaluation, Authorisation of Chemicals SVHC: substance of very high concern TRGS: Technische Regeln für Gefahrstoffe UN: United Nations VOC: Volatile Organic Compounds WGK: Water Hazard Class (Germany) **Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be

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transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)