Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Date of issue: 28.09.2023 Version: 1.0

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

1.1. Product identifier

| Product form | : Mixture |
|--------------|-----------------|
| Name | : Reagent DPD3C |
| Trade name | : Reagent DPD3C |
| Product code | : POLR-D3C |
| | |

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

1.2.1. Relevant identified uses

Main use category

: Reagent for water analysis

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

labbox labware s.l. Migjorn, 1 P.O. Box Barcelona (SPAIN) 08338 Premia de Dalt - SPAIN ES T +34 937 07 79 70 - F +34 937 909 532 info@labbox.com - www.labbox.com

1.4. Emergency telephone number

Emergency number

: +34 937 077 970 (For technical information_Office Hours) In case of medical emergency phone 112 or to your local emergency number.

| Country | Organisation/Company | Address | Emergency number | Comment |
|----------------|---|----------------------------|------------------|---------|
| United Kingdom | National Poisons Information Service (Belfast Centre) Royal Victoria Hospital | Grosvenor Road BT12 6BA | 0344 892 0111 | |

SECTION 2: Hazards identification 2.1. Classification of the substance or mixture Classification according to Regulation (EC) No. 1272/2008 [CLP] Skin corrosion/irritation, Category 1 H314 Full text of H and EUH statements: see section 16 Adverse physicochemical, human health and environmental effects No additional information available 2.2. Label elements Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms (CLP) GHS05

Signal word (CLP) Hazard statements (CLP) : Danger

: H314 - Causes severe skin burns and eye damage.

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| Precautionary statements (CLP) : P260 - Do not breathe dust/fume/gas/mist/vapours/spray. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all conta clothing. Rinse skin with water/shower. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTER or doctor/physician. | aminated |
|--|----------|
|--|----------|

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|-----------------------|---|-------|--|
| Citric acid anhydrous | CAS-No.: 77-92-9 EC-No.: 201-069-1 | 1 – 5 | Eye Irrit. 2, H319 |
| POTASSIUM IODIDE | CAS-No.: 7681-11-0 EC-No.: 231-659-4 | 1 – 5 | Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 |

Full text of H and EUH statements: see section 16

| SECTION 4: First aid measures | |
|--|--|
| 4.1. Description of first aid measures | |
| First-aid measures general | : If you feel unwell, seek medical advice (show the label where possible). Seek medical attention immediately. |
| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. Get immediate medical advice/attention. |
| First-aid measures after skin contact | : Gently wash with plenty of soap and water. Get immediate medical advice/attention. |
| First-aid measures after eye contact | Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention. |
| First-aid measures after ingestion | : Rinse mouth out with water. Do not induce vomiting. Give water to drink. Get medical advice/attention. |
| 4.2. Most important symptoms and effects | s, both acute and delayed |
| Symptoms/effects after inhalation | : Burning sensation. |

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

Never give anything by mouth to an unconscious person.

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| SECTION 5: Firefighting measures | | |
|--|--|--|
| 5.1. Extinguishing media | | |
| Suitable extinguishing media Unsuitable extinguishing media | Making extinguishing agents environment-friendly.Strong water jet. | |
| 5.2. Special hazards arising from the su | ibstance or mixture | |
| No additional information available | | |
| 5.3. Advice for firefighters | | |
| Firefighting instructions Protection during firefighting | Exercise caution when fighting any chemical fire. Do not enter fire area without proper protective equipment, including respiratory protection. | |
| SECTION 6: Accidental release mea | asures | |
| 6.1. Personal precautions, protective ec | quipment and emergency procedures | |
| 6.1.1. For non-emergency personnel | | |
| Emergency procedures | : Do not get in eyes, on skin, or on clothing. Only qualified personnel equipped with suitable protective equipment may intervene. | |
| 6.1.2. For emergency responders | | |
| No additional information available | | |
| 6.2. Environmental precautions | | |
| Prevent entry to sewers and public waters. | | |
| 6.3. Methods and material for containment and cleaning up | | |
| Methods for cleaning up | : Collect spillage. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. | |
| Other information | : Dispose of materials or solid residues at an authorized site. | |
| 6.4. Reference to other sections | | |
| See Heading 8. For further information refer to section 13. | | |

| SECTION 7: Handling and storage | |
|---|---|
| 7.1. Precautions for safe handling | |
| Additional hazards when processed Hygiene measures | Avoid any direct contact with the product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. |
| 7.2. Conditions for safe storage, inclu | iding any incompatibilities |
| Storage conditions | : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Store in a well-ventilated place. Keep container tightly closed. |
| Packaging materials | : Keep only in the original container in a cool,well-ventilated place away from combustible materials. |
| 7.3. Specific end use(s) | |

Laboratory chemicals. Reagent for water analysis.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

| Reagent DPD3C | | |
|---|---------------------|--|
| Bulgaria - Occupational Exposure Limits | | |
| OEL TWA | 5 mg/m³ | |
| Czech Republic - Occupational Exposure Limits | | |
| PEL (OEL TWA) | 4 mg/m ³ | |
| Germany - Occupational Exposure Limits (TRGS 90 | 0) | |
| AGW (OEL TWA) [1] | 2 mg/m ³ | |
| Ireland - Occupational Exposure Limits | | |
| OEL TWA [1] | 0,01 mg/m³ | |
| OEL TWA [2] | 0,01 ppm | |
| OEL STEL [ppm] | 0,1 ppm | |
| Italy - Occupational Exposure Limits | | |
| OEL TWA [ppm] | 0,01 ppm | |
| OEL STEL [ppm] | 0,1 ppm | |
| Switzerland - Occupational Exposure Limits | | |
| MAK (OEL TWA) [1] | 2 mg/m ³ | |
| KZGW (OEL STEL) | 4 mg/m ³ | |

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure. EN 374.

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Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Protective goggles (EN 166)

8.2.2.2. Skin protection

Skin and body protection: Wear suitable protective clothing

Hand protection:

Protective gloves

| Hand protection | | | | | |
|-------------------|----------|------------|----------------|-------------|------------|
| Туре | Material | Permeation | Thickness (mm) | Penetration | Standard |
| Disposable gloves | | | | | EN ISO 374 |

8.2.2.3. Respiratory protection

Respiratory protection:

No respiratory protection needed under normal use conditions. In case of inadequate ventilation wear respiratory protection.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical state | : | Liquid |
|---|---|----------------|
| Colour | : | light yellow. |
| Odour | : | odourless. |
| Odour threshold | : | Not available |
| Melting point | : | Not available |
| Freezing point | : | Not available |
| Boiling point | : | Not available |
| Flammability | : | Not available |
| Lower explosion limit | : | Not available |
| Upper explosion limit | : | Not available |
| Flash point | : | Not available |
| Auto-ignition temperature | : | Not available |
| Decomposition temperature | : | Not available |
| рН | : | 2 |
| Viscosity, kinematic | : | Not available |
| Solubility | : | Not available |
| Partition coefficient n-octanol/water (Log Kow) | : | Not available |
| Vapour pressure | : | Not available |
| Vapour pressure at 50 °C | : | Not available |
| Density | : | Not available |
| Relative density | : | Not available |
| Relative vapour density at 20 °C | : | Not available |
| Particle characteristics | : | Not applicable |
| | | |

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9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Acids. Bases.

10.6. Hazardous decomposition products

No additional information available

| SECTION 11: Toxicological informati | ion |
|---|---|
| 11.1. Information on hazard classes as d | efined in Regulation (EC) No 1272/2008 |
| Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation) | Not classified Not classified Not classified |
| Reagent DPD3C | |
| LD50 oral rat | 3 g/kg |
| LD50 dermal rat | > 2000 mg/kg |
| Citric acid anhydrous (77-92-9) | |
| LD50 oral | 5400 mg/kg bodyweight Animal: mouse, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 4500 - 6400 |
| LD50 dermal rat | > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) |
| Skin corrosion/irritation | : Causes severe skin burns. pH: 2 |
| Citric acid anhydrous (77-92-9) | |
| рН | 1,8 5% (25°C) |
| Serious eye damage/irritation | Assumed to cause serious eye damage pH: 2 |
| Citric acid anhydrous (77-92-9) | |
| рН | 1,8 5% (25°C) |

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| Respiratory or skin sensitisation | : | Not classified |
|------------------------------------|---|-----------------------------------|
| Germ cell mutagenicity | : | Not classified |
| Carcinogenicity | : | Not classified |
| Reproductive toxicity | : | Not classified |
| STOT-single exposure | : | Not classified |
| STOT-repeated exposure | : | Not classified |
| Citric acid anhydrous (77-92-9) | | |
| LOAEL (oral, rat, 90 days) | | 8000 mg/kg bodyweight Animal: rat |
| NOAEL (oral, rat, 90 days) | | 4000 mg/kg bodyweight Animal: rat |
| Aspiration hazard | : | Not classified |
| 11.2. Information on other hazards | | |

11.2.1. Endocrine disrupting properties

| Adverse health effects caused by endocrine | : Not applicable |
|--|------------------|
| disrupting properties | |

11.2.2. Other information

No additional information available

SECTION 12: Ecological information

| 12.1. Toxicity | | |
|--|---------------------|--|
| Hazardous to the aquatic environment, short-term : Not classified (acute) | | |
| Hazardous to the aquatic environment, long-term : Not classified (chronic) | | |
| Reagent DPD3C | | |
| LC50 - Fish [1] | 1516 mg/l | |
| Citric acid anhydrous (77-92-9) | | |
| EC50 - Daphnia [1] | 440 mg/l | |
| ErC50 algae | 425 mg/l | |
| 12.2. Persistence and degradability | | |
| Citric acid anhydrous (77-92-9) | | |
| Biochemical oxygen demand (BOD) | 526 g O2/l | |
| Chemical oxygen demand (COD) | 728 g O2/l | |
| Biodegradation | 97 % | |
| 12.3. Bioaccumulative potential | | |
| Citric acid anhydrous (77-92-9) | | |
| Partition coefficient n-octanol/water (Log Pow) | -1,80,2 | |
| Bioaccumulative potential | No bioaccumulation. | |
| 12.4. Mobility in soil | | |

No additional information available

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| according to the REACH Regulation (EC) 1907/2006 amer | nded by Regulation (EU) 2020/878 | | |
|--|--|--|--|
| 12.5. Results of PBT and vPvB assessmen | nt | | |
| Reagent DPD3C | | | |
| This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII | | | |
| 12.6. Endocrine disrupting properties | | | |
| Adverse effects on the environment caused by endocrine disrupting properties | : Not applicable. | | |
| 12.7. Other adverse effects | | | |
| Other adverse effects | : Do not discharge into drains or rivers. | | |
| SECTION 13: Disposal considerations | | | |
| 13.1. Waste treatment methods | | | |
| Waste treatment methods | : Must follow special treatment according to local regulation. | | |
| SECTION 14: Transport information | | | |
| In accordance with ADR / IMDG / IATA / ADN / RID |) | | |
| 14.1. UN number or ID number | | | |
| UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID) | Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable | | |
| 14.2. UN proper shipping name | | | |
| Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID) | Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable | | |
| 14.3. Transport hazard class(es) | | | |
| ADR Transport hazard class(es) (ADR) | : Not applicable | | |
| IMDG Transport hazard class(es) (IMDG) | : Not applicable | | |
| IATA Transport hazard class(es) (IATA) | : Not applicable | | |
| ADN Transport hazard class(es) (ADN) | : Not applicable | | |
| RID Transport hazard class(es) (RID) | : Not applicable | | |
| 14.4. Packing group | | | |
| Packing group (ADR) Packing group (IMDG) Packing group (IATA) | : Not applicable : Not applicable | | |

Packing group (IATA)

Packing group (ADN)

: Not applicable

: Not applicable

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| according to the REACH Regulation (EC) 1907 | 2000 amended by Regulation (EO) 2020/070 | |
|---|--|--|
| Packing group (RID) | : Not applicable | |
| 14.5. Environmental hazards | | |
| Other information | : No supplementary information available | |
| 14.6. Special precautions for user | | |
| Overland transport Not applicable | | |
| Transport by sea Not applicable | | |
| Air transport Not applicable | | |
| Inland waterway transport Not applicable | | |
| Rail transport | | |

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no REACH substances with Annex XVII restrictions

REACH Annex XIV (Authorisation List)

Contains no REACH Annex XIV substances

REACH Candidate List (SVHC)

Contains no substance on the REACH candidate list

PIC Regulation (Prior Informed Consent)

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Drug Precursors Regulation (273/2004)

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

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15.1.2. National regulations

Germany

| Water hazard class (WGK) Hazardous Incident Ordinance (12. BImSchV) | WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1). Is not subject of the Hazardous Incident Ordinance (12. BImSchV) |
|---|---|
| Netherlands | |
| SZW-lijst van kankerverwekkende stoffen SZW-lijst van mutagene stoffen NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling | None of the components are listed |
| Denmark Danish National Regulations Switzerland Storage class (LK) | : Young people below the age of 18 years are not allowed to use the product : LK 8 - Corrosive materials |
| 15.2. Chemical safety assessment | |

No additional information available

| SECTION 16: Other information | | |
|-------------------------------------|---|--|
| Full text of H- and EUH-statements: | | |
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 | |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 | |
| H302 | Harmful if swallowed. | |
| H314 | Causes severe skin burns and eye damage. | |
| H315 | Causes skin irritation. | |
| H319 | Causes serious eye irritation. | |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 | |

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.