1 Identification

- Product identifier
  - Trade name: Carbon as TOC 1000μg/mL in H2O
  - Article number: 100071-9

- Details of the supplier of the safety data sheet
  - Manufacturer/Supplier: High-Purity Standards
    PO Box 41727 Charleston, SC 29423 United States
    Telephone: +1-843-767-7900
    Fax: +1-843-767-7906
    highpuritystandards.com
    Email: info@highpuritystandards.com
  - Information department: Product safety department
  - Emergency telephone number: INFOTRAC
    Emergency telephone numbers 1-800-535-5053
    Other emergency telephone numbers 1-352-323-3500

2 Hazard(s) identification

- Classification of the substance or mixture
  The product is not classified, according to the Globally Harmonized System (GHS).

- Label elements
  - GHS label elements: Void
  - Hazard pictograms: Void
  - Signal word: Void
  - Hazard statements: Void
  - Classification system:
    - NFPA ratings (scale 0 - 4)
      Health = 0
      Fire = 0
      Reactivity = 0
    - HMIS-ratings (scale 0 - 4)
      HEALTH 0
      FIRE 0
      REACTIVITY 0
  - Other hazards
    - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.

(Contd. on page 2)
Trade name: Carbon as TOC 1000μg/mL in H2O

· **Dangerous components:** Void

· **Chemical identification of the substance/preparation**
  - 7732-18-5 water, distilled, conductivity or of similar purity 99.9%
  - 877-24-7 potassium hydrogen phthalate 0.1%

### 4 First-aid measures

· **Description of first aid measures**
  - **General information:** No special measures required.
  - **After inhalation:** Supply fresh air; consult doctor in case of complaints.
  - **After skin contact:** Generally the product does not irritate the skin.
  - **After eye contact:** Rinse opened eye for several minutes under running water.
  - **After swallowing:** If symptoms persist consult 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 fighting measures that suit the environment.
  - **Special hazards arising from the substance or mixture** No further relevant information available.

· **Advice for firefighters**
  - **Protective equipment:** No special measures required.

### 6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures** Not required.
· **Environmental precautions:** No special measures required.
· **Methods and material for containment and cleaning up:**
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
· **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.

· **Protective Action Criteria for Chemicals**

  **PAC-1:**
  - 877-24-7 potassium hydrogen phthalate 9.6 mg/m³

  **PAC-2:**
  - 877-24-7 potassium hydrogen phthalate 110 mg/m³

  **PAC-3:**
  - 877-24-7 potassium hydrogen phthalate 630 mg/m³
### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special measures required.
- **Information about protection against explosions and fires:** 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:** Not required.
  - **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components 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 that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
  - **General protective and hygienic measures:**
    The usual precautionary measures for handling chemicals should be followed.
  - **Breathing equipment:** Not required.
  - **Protection of hands:**
    The glove material has to be impermeable and resistant 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.
- **Eye protection:** Goggles recommended during refilling.

### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  - **General Information**
  - **Appearance:**
    - **Form:** Liquid
    - **Color:** colorless

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## 49.4.3

| · Odor:                | Characteristic                       |
|· Odor threshold:      | Not determined.                       |
|· pH-value:            | Not determined.                       |
|· Change in condition  |                                        |
| Melting point/Melting range: | Undetermined.                       |
| Boiling point/Boiling range: | 100 °C (212 °F)       |
|· Flash point:         | Not applicable.                       |
|· Flammability (solid, gaseous): | Not applicable.                     |
|· Decomposition temperature: | Not determined.                     |
|· Auto igniting:       | Product is not selfigniting.         |
|· Danger of explosion: | Product does not present an explosion hazard. |
|· Explosion limits:    |                                        |
| Lower:                | Not determined.                       |
| Upper:                | Not determined.                       |
|· Vapor pressure at 20 °C (68 °F): | 23 hPa (17.3 mm Hg)               |
|· Density at 20 °C (68 °F): | 1 g/cm³ (8.345 lbs/gal)              |
|· Bulk density:        | 1,000 kg/m³                          |
|· Relative density:    | Not determined.                       |
|· Vapor density:       | Not determined.                       |
|· Evaporation rate:    | Not determined.                       |
|· Solubility in / Miscibility with Water: | Not miscible or difficult to mix.  |
|· Partition coefficient (n-octanol/water): | Not determined.                     |
|· Viscosity: Dynamic:  | Not determined.                       |
| Kinematic:            | Not determined.                       |
|· Solvent content:     |                                        |
| Water:                | 99.9 %                                |
| VOC content:          | 0.00 %                                |
|                       | 0.0 g/l / 0.00 lb/gal                |
|· Solids content:      | 0.0 %                                 |
|· Other information    | No further relevant information available. |

### 10 Stability and reactivity

| · Reactivity | No further relevant information available. |
| · 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. |
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· Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects
  · Acute toxicity:
  · Primary irritant effect:
    · on the skin: No irritant effect.
    · on the eye: No irritating effect.
  · Sensitization: No sensitizing effects known.
  · Additional toxicological information:
    The product is not subject to classification according to internally approved calculation methods for preparations:
    When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· Carcinogenic categories
  · IARC (International Agency for Research on Cancer)
    None of the ingredients is listed.
  · NTP (National Toxicology Program)
    None of the ingredients is listed.
  · OSHA-Ca (Occupational Safety & Health Administration)
    None of the ingredients is listed.

12 Ecological information

· Toxicity
  · Aquatic toxicity: No further relevant information available.
  · Persistence and degradability No further relevant information available.
  · Behavior in environmental systems:
    · Bioaccumulative potential No further relevant information available.
    · Mobility in soil No further relevant information available.
  · Additional ecological information:
    · General notes: Not hazardous for water.
    · Results of PBT and vPvB assessment
      · PBT: Not applicable.
      · vPvB: Not applicable.
    · Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods
  · Recommendation: Smaller quantities can be disposed of with household waste.
### 14 Transport information

- **UN-Number**  
  - DOT, ADR, IMDG, IATA: not regulated
- **UN proper shipping name**  
  - DOT, ADR, IMDG, IATA: not regulated
- **Transport hazard class(es)**  
  - DOT, ADR, ADN, IMDG, IATA: not regulated
  - Class: not regulated
- **Packing group**  
  - DOT, ADR, IMDG, IATA: not regulated
- **Environmental hazards:** Not applicable.
- **Special precautions for user** Not applicable.
- **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.
- **UN "Model Regulation":** not regulated

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - Sara
  - Section 355 (extremely hazardous substances): None of the ingredients is listed.
  - Section 313 (Specific toxic chemical listings): None of the ingredients is listed.
  - TSCA (Toxic Substances Control Act): All components have the value ACTIVE.
- **Hazardous Air Pollutants** None of the ingredients is listed.
- **Proposition 65**
  - Chemicals known to cause cancer: None of the ingredients is listed.
  - Chemicals known to cause reproductive toxicity for females: None of the ingredients is listed.
  - Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed.
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- Chemicals known to cause developmental toxicity:
  None of the ingredients is listed.

- Carcinogenic categories
  - EPA (Environmental Protection Agency)
    None of the ingredients is listed.
  - TLV (Threshold Limit Value established by ACGIH)
    None of the ingredients is listed.
  - NIOSH-Ca (National Institute for Occupational Safety and Health)
    None of the ingredients is listed.

- GHS label elements Void
- Hazard pictograms Void
- Signal word Void
- Hazard statements Void
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing SDS: Environment protection department.
- Contact:
  High-Purity Standards
  Tel: 843-767-7900
  Fax: 843-767-7906
- Date of preparation / last revision 08/16/2019 / -
- 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)
  IMDG: International Maritime Code for Dangerous Goods
  DOT: US Department of Transportation
  IATA: International Air Transport Association
  ACGIH: American Conference of Governmental Industrial Hygienists
  EINECS: European Inventory of Existing Commercial Chemical Substances
  ELINCS: European List of Notified Chemical Substances
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  NFPA: National Fire Protection Association (USA)
  HMIS: Hazardous Materials Identification System (USA)
  VOC: Volatile Organic Compounds (USA, EU)
  PBT: Persistent, Bioaccumulative and Toxic
  vPvB: very Persistent and very Bioaccumulative
  NIOSH: National Institute for Occupational Safety
  OSHA: Occupational Safety & Health
  TLV: Threshold Limit Value
  REL: Permissible Exposure Limit
  PEL: Permissible Exposure Limit
  US