GEH® Recommendations for the Disinfection of Adsorbers

- Disinfection process
  - We recommend using sodium hypochlorite or hydrogen peroxide as disinfectant agent for GEH® adsorber beds.
  - The whole GEH® quantity and all related plant components have to be in contact with the disinfecting agent for at least two hours, e.g. by:
    - Continuous dosage of disinfecting agent with the GEH® during filling procedure
    - Circulation of disinfection solution through the adsorber bed
  - After disinfection, backwash adsorber bed (in the same manner as the installation backwash, see Technical Datasheet “Adsorber Units”)
  - Confirm successful disinfection by checking microbial parameters, i.e. conformance of treated water to applicable drinking water specification
  - An additional disinfection is recommended when the adsorber is not operated for more than a week

- Following conditions have been proven effective in practice

<table>
<thead>
<tr>
<th>Disinfecting agent</th>
<th>Sodium hypochlorite, NaClO (12 % Cl²)</th>
<th>Hydrogen peroxide, H₂O₂ (30 – 50 %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dosage</td>
<td>ca. 120 g Cl² / m³ GEH®</td>
<td>ca. 2000 g H₂O₂ / m³ GEH®</td>
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<tr>
<td>Concentration target inside the adsorber</td>
<td>5 – 20 mg / L Cl²</td>
<td>1 – 2 g / L H₂O₂</td>
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</tbody>
</table>

⚠️ Hydrogen peroxide decomposes and evolves gas upon contact with GEH®.
⚠️ Vent adsorber unit accordingly to permit gas release (e.g. open top manhole).
Important information

⚠️ All work described is to be done by qualified technical personnel only and in accordance with all applicable safety regulations.

⚠️ Every application in water treatment is unique. The application at hand must be studied in detail including all peripheral factors before the operating conditions of the GEH® system can be determined. Accordingly, the recommendations given above are general in nature and not legally binding.

⚠️ We will gladly provide applications advice regarding dimensioning and operation of your specific GEH® adsorber unit.

⚠️ Please observe all instructions and information given in our product data sheets and safety data sheets.