Granular Ferric Hydroxide for Drinking Water Treatment

✓ Producing drinking water from ground water
✓ Water treatment for the food industry

Product Description
We developed GEH® 102 specifically for the drinking water treatment. Based on granular ferric hydroxide, it removes hazardous substances from water selectively, but sustains the natural content of minerals and trace elements. This is ensured by the patented production and purity of our adsorbent. GEH® for drinking water treatment meets all requirements of DIN EN 15029 and is certified according to international standard NSF/ANSI 61.

Meet drinking water limits safely – with GEH® 102.

Target Substances
Contaminants, which are removed by GEH® 102 from water:

- Arsenic (As)
- Copper (Cu)
- Molybdenum (Mo)
- Lead (Pb)
- Antimony (Sb)
- Uranium (U)
- Vanadium (V)
- Zinc (Zn)
- Hydrogen Peroxide (H₂O₂)
- Hydrogen Sulfide (H₂S)
- Phosphate (PO₄)
- Silicate (SiO₄)
Granular Ferric Hydroxide for Drinking Water Treatment

Properties

<table>
<thead>
<tr>
<th>Chemical composition</th>
<th>β-FeOOH and Fe(OH)₃</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry solid content</td>
<td>58 % (± 10 %)</td>
</tr>
<tr>
<td>Iron content, relative to dry solids</td>
<td>600 g/kg (± 10 %)</td>
</tr>
<tr>
<td>Particle size range</td>
<td>0.2 – 2.0 mm</td>
</tr>
<tr>
<td>Undersize fraction</td>
<td>&lt; 10 %</td>
</tr>
<tr>
<td>Total oversize and undersize fraction</td>
<td>&lt; 20 %</td>
</tr>
<tr>
<td>Bulk density, backwashed</td>
<td>1150 kg/m³ (± 10 %)</td>
</tr>
<tr>
<td>Specific surface area (BET-method)</td>
<td>approx. 300 m²/g</td>
</tr>
</tbody>
</table>

Point-of-Use-Systems
GEH® 102 is commonly used in adsorption filters, but can also be applied in cartridge systems for the end-user (point-of-use systems). The adsorption capacity depends on the water parameters and operating conditions. In principle, the same operating recommendations apply to point-of-use systems as to adsorption filters in centralized water treatment.

Transport and Storage
The packaging takes place in big bags or plastic drums, whereby the filling quantities are directed to the individual customers’ needs. The product is stable and can be stored for at least one year. To prevent the material from drying out, the big bags should be closed and, if possible, not stored outdoors. Outdoor storage is possible in plastic bags or protected from direct sunlight and at moderate temperatures (0 - 25° C). The big bags must not be stacked.

Individual Application Advice
Every application in water treatment has its own special requirements. A meaningful dimensioning of the plant and definition of the operating conditions can only be made after examining the individual case. The recommendations contained in this data sheet are therefore legally not binding. We will gladly advise you in detail on your application.

In addition, the General Terms and Conditions of GEH Wasserchemie GmbH & Co. KG apply.