



Granular Ferric Hydroxide for Precipitation

- ✓ Treatment of roof runoff from zinc and copper roofs
- ✓ Removal of heavy metals from street runoff

■ Product Description

Heavy metals and pollutants easily enter the water cycle with the rain from roofs or road drains.

To remove these impurities from your rainwater, we offer GEH® 105. The specific and effective mode of action of the granular ferric hydroxide results from its patented production process. It is characterized by high quality and meets all requirements of DIN EN 15029.

Meet your environmental requirements reliably – with GEH® for rainwater treatment.

■ Target Substances

Contaminants, which are removed by GEH® 105 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 (SiO₂)

Granular Ferric Hydroxide for Precipitation



■ Properties

Chemical composition	β -FeOOH and Fe(OH) ₃
Dry solid content	58 % (± 10 %)
Iron content, relative to dry solids	600 g/kg (± 10 %)
Particle size range	0.2 – 2.0 mm
Undersize fraction	< 10 %
Total oversize and undersize fraction	< 20 %
Bulk density, backwashed	1150 kg/m ³ (± 10 %)
Specific surface area (BET-method)	approx. 300 m ² /g

■ GEH® 105 M

For mechanical stabilization and to increase the pH, GEH® 105 M contains 50 % calcium carbonate. The addition can be done at factory or on site.

■ Infiltration Systems

GEH® 105 can be used in adsorption filters or infiltration systems (e.g., trenches or drainage shafts). When designing an infiltration system, the calculation of the required quantity of GEH® 105, as well as the hydraulic load on the system due to the maximum amount of precipitation, is required. Therefore, a specialized planner should be consulted.

■ 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.



Certified to NSF/ANSI 61



Quality management system certified in accordance with ISO 9001:2015



GEH Wasserchemie GmbH & Co. KG
Adolf-Köhne-Straße 4
49090 Osnabrück, Germany

Tel. +49 (0) 541 12 20 09
Fax +49 (0) 541 18 11 990
info@geh-wasserchemie.de

www.geh-wasserchemie.de