



SEVERN
TRENT
SERVICES



Bayoxide® E33

Arsenic Removal Media

Bayoxide® E33 Arsenic Removal Media

Long term exposure to arsenic is proven to have a detrimental effect on human health. Consequently the global water treatment market has been tasked with finding technological solutions to reduce arsenic levels from the old WHO permissible 50 µg/l (micrograms per litre) level to below 10 µg/l.

Severn Trent Services' arsenic removal program incorporates a process and filter media that can be used by those feeling the pressures of regulatory compliance. The SORB 33® technology uses Bayoxide® E33 granular or Bayoxide® E33P pelletized, iron oxide media. Both forms of the iron oxide media have a high capacity for arsenic removal. The ferric oxide absorptive media is capable of reducing arsenic levels to below 4 µg/l across a complete range of drinking and non drinking water applications and is approved for use in potable water treatment by the UK Secretary of State, French Ministry of Health and the US National Sanitary Foundation (NSF61).

Severn Trent Services' arsenic removal experience dates back to 1999 with 16 arsenic removal treatment facilities treating over 174 Ml/d for over 500,000 customers in the UK. Severn Trent Services and its Bayoxide® E33 have over 240 full scale systems awarded worldwide, with numerous installations throughout Europe.

Bayoxide® E33 media applications:

- Drinking Water
- Bottled Water Production
- Food and Beverage
- Factories and Process
- Private wells
- Wastewater treatment

Bayoxide® E33 media advantages:

- High capacity for arsenic removal
- Removes both As (III) and As (V) below 4 µg/l
- Robust dry media
- Long media life under continuous operation
- Low capital costs
- Low operating costs
- Easy disposal of spent media
- Long shelf life of dry media

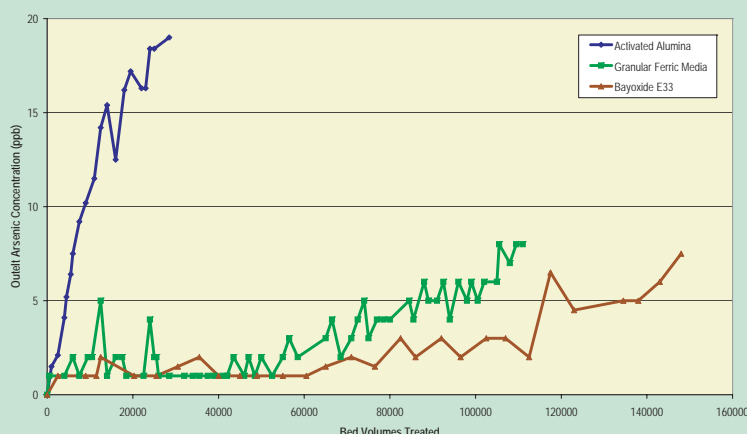
Technical details Bayoxide E33 media:

- Chemical Designation: Synthetic Iron Oxide
- Fe₂O₃ Content >70%
- Specific Surface Area: 120 - 200 m²/g
- Sieve Analysis: <0.5mm, 20% max >2.0mm, 5% max
- Bulk Density: Approx. 0.4 - 0.6 kg/litre
- Certification by the UK Secretary of State, French Ministry of Health and to NSF 61

Technical details Bayoxide E33P media:

- Chemical Designation: Synthetic Iron Oxide
- Fe₂O₃ Content >70%
- Specific Surface Area: 120 - 200 m²/g
- Sieve Analysis: <1.0 mm, 20 % max., >1.4 mm, 5% max
- Bulk Density: Approx. 0.4 - 0.6 kg/litre

Comparisons of Different Adsorption Media



Worldwide experience:

Severn Trent Services has arsenic removal installations across the world using Bayoxide E33® arsenic removal media.

- | | |
|----------|------------|
| • USA | • Sweden |
| • UK | • Hungary |
| • Italy | • Andorra |
| • Chile | • Ireland |
| • Spain | • Japan |
| • Serbia | • Portugal |
| • France | • India |

Severn Trent Services

Arley Drive, Birch Coppice Business Park

Dordon, Tamworth B78 1SA

Tel +44 (0) 182 726 6000 • Fax +44 (0) 182 726 6099

salesenq@severntrentservices.co.uk

www.severntrentservices.com