



## TECHNICAL DATASHEET

# A1-F Resin

Arsenic removal resin for water treatment

A1-F is a high-selectivity arsenic removal resin designed for potable water treatment and other aqueous solutions. Its iron-oxide-based composition provides a strong affinity for arsenic, delivering high operating capacity and long service life, especially when properly regenerated.

### SPECIFICATION AND TYPICAL PROPERTIES\*

Matrix Structure	-	Cross-linked polystyrene
Appearance	-	Brown-Red Spheres
Bulk Density	kg/m <sup>3</sup>	800±50
Density	kg/m <sup>3</sup>	1230±50
Particle Size Distribution	mm	0.315-1.25
Moisture Content	%	55±5
Arsenic Capacity	g/L	0.5-4
Total Capacity	eq/L	min. 1.5

### RECOMMENDED OPERATING CONDITIONS

Temperature	°C	max. 80
pH	-	4-8
Flowrate	BV*/h	4-10
Regenerants	-	NaOH; NaCl
Concentration	%	2% (NaOH); 10% (NaCl)
Regeneration Flowrate	BV*/h	2-3
Contact Time	min	min. 30
Fast Rinse	BV*/h	2-4

\*1 BV (Bed Volume) = 1 m<sup>3</sup> solution per m<sup>3</sup> resin

\*Specifications and typical properties are listed for informational purposes only and not to be used as purchase specifications.

### Features and Benefits

- Optimal performance in neutral to alkaline conditions
- Supplied in bead form for efficient operation
- Suitable for both small cartridges and large industrial columns
- Easy handling and operation, similar to standard ion exchange resins

### Safety Advice

- Store resins in sealed containers above 0 °C, in dry conditions, and away from direct sunlight
- Do not mix resins with strong oxidizing agents to avoid dangerous reactions
- If resin contacts the eyes, rinse with plenty of water and seek medical attention
- Dry polymers expand when wetted and may release heat
- Spilled resin beads can be slippery

### Disposal

At the end of its service life, the resin should be disposed of in a responsible manner and in accordance with all applicable local regulations and site requirements.