

GRAVEX



Graver Technologies

GR 1-0 UP

Ultra Pure Grade

Gravex GR 1-0 UP is a high capacity, Type I, gel anion exchange resin. This product is highly regenerated to greater than 97% hydroxide sites and specially processed to insure low TOC levels for ultrapure water applications. It is suitable for use in a two bed system following the GR 2-0 UP ultrapure cation or the two products are available as the polishing mixed bed GR 3-0 UP.

TYPICAL PROPERTIES

Type		Strong Base Anion
Matrix		Styrene Divinylbenzene
Functionality		Quaternary Ammonium
Ionic Form		Hydroxide
Total Exchange Capacity	meq/mL	1.2 (min)
Hydroxide Conversion	%	97 (min)
Water Retention	%	43-48 (Cl Form)
Friability		
Average	g/bead	350 (min)
> 200 g/bead	%	95 (min)
Particle Size		
> 16 mesh	%	2 (max)
< 45 mesh	%	2 (max)
Approx. Shipping Weight	lbs/ft ³	41

RINSE PROPERTIES

10 ppb Δ TOC	Bed Volumes	80 (max)
15 megohm-cm Resistivity	Bed Volumes	80 (max)



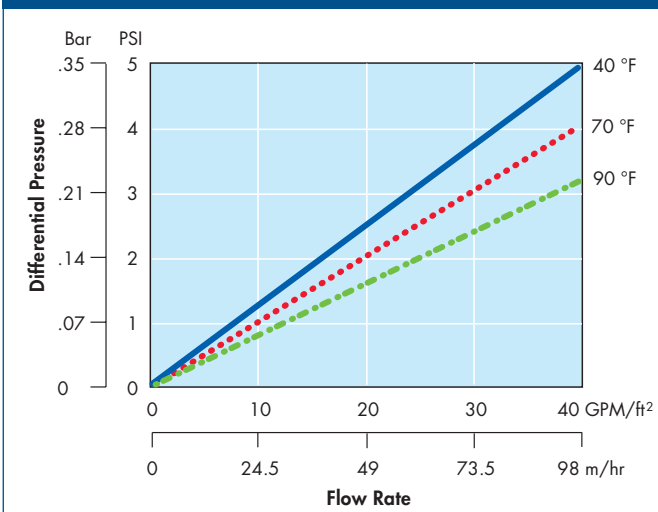
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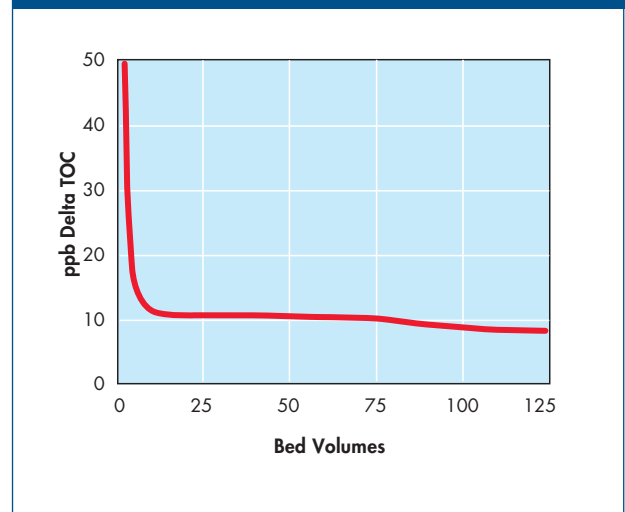
RECOMMENDED OPERATING CONDITIONS

Max. Operating Temperature	60°C (140°F)
Min. Bed Depth	800 mm (2.6 ft)
Linear Flow Rate	5–60 m/hr (2–24 gpm/ft ²)
Volume Flow Rate	8–48 BV/hr (1–6 gpm/ft ³)
Regenerant	NaOH
Concentration	4–8 %
Dosage	64–240 g/L (4–15 lbs/ft ³)
Linear Flow Rate	1–10 m/hr (0.4–4 gpm/ft ²)
Volume Flow Rate	1.5–4 BV/hr (0.2–0.5 gpm/ft ³)
Rinse	
Linear Flow Rate	5–40 m/hr (2–16 gpm/ft ²)
Volume Flow Rate	8–32 BV/hr (1–4 gpm/ft ³)

GR 1-0 UP – PRESSURE DROP



GR 1-0 UP – TYPICAL DELTA TOC



For more information

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