RESINTECH® INC.
INNOVATIONS IN ION EXCHANGE

WBG30

ANION EXCHANGE RESIN
WEAK BASE GRANULAR GEL
FREE BASE FORM

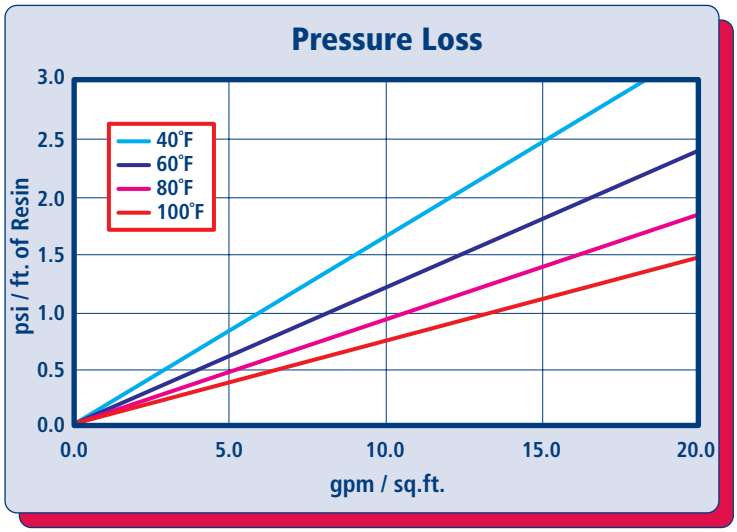
RESINTECH WBG30 is a granular gel epoxy polyamine weak base anion resin. *WBG30* has higher capacity than other anion exchange resins and has substantial strong base functionality. *RESINTECH WBG30* is intended for single use applications that require the highest possible operating capacity. *WBG30* is available in the free base form or with the strong base sites regenerated into the hydroxide form (when ordered as WBG30-OH).

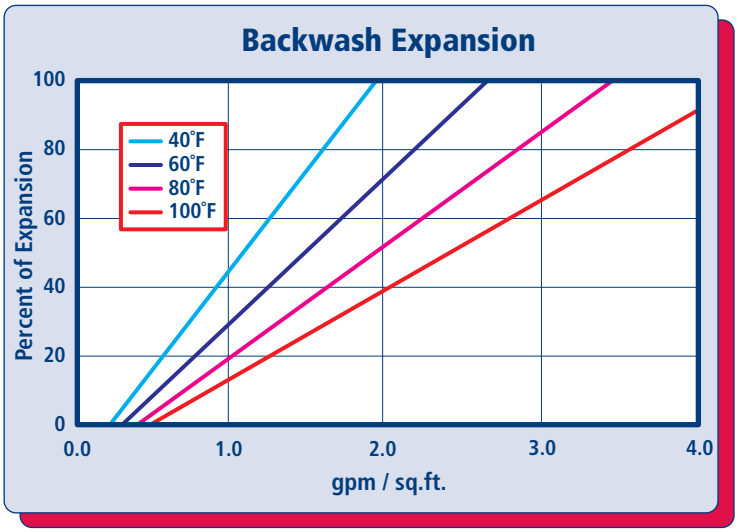
FEATURES & BENEFITS

- **HIGHEST OPERATING CAPACITY**
  Substantially higher capacity than other types of weak base anion resins
- **SIGNIFICANT SALT SPLITTING CAPACITY**
  High fraction of strong base capacity provides exceptional rinse characteristics and some removal of carbon dioxide
- **CONTROLLED GRANULE SIZE**
  Large granules provide good physical strength and minimal fines provide low pressure loss
- **SELECTIVE FOR CHELATED METAL COMPLEXES**
  Removes metal complexes such as those formed with EDTA when used in the salt form

Prior to first use, resin should be backwashed for a minimum of 20 minutes, followed by 10 bed volumes of downflow rinse.

HYDRAULIC PROPERTIES





PRESSURE LOSS

The graph above shows the expected pressure loss of *ResinTech WBG30* per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH

The graph above shows the expansion characteristics of *ResinTech WBG30* as a function of flow rate at various temperatures.

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RESINTECH® WBG30

PHYSICAL PROPERTIES

Polymer Structure	Epoxy polyamine
Polymer Type	Gel
Functional Group	Polyamine
Physical Form	Granular beads
Ionic Form as shipped	Free Base
Total Capacity	
Free Base form	>2.8 meq/mL
Water Retention	
Free Base form	52 to 58 percent
Approximate Shipping Weight	
Free Base form	38 lbs./cu.ft.
Swelling, Free Base to Cl	10 to 15 percent
Screen Size Distribution (U.S. mesh)	12 to 50
Maximum Fines Content (<50 mesh)	1 percent
Uniformity Coefficient	2 approx.
Resin Color	Amber

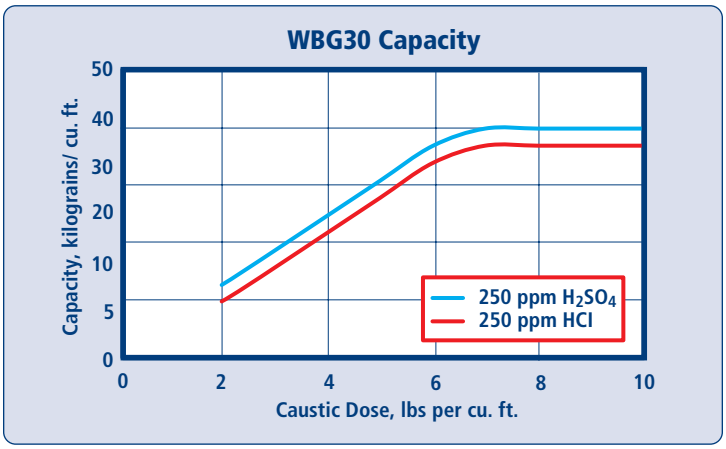
Note: Physical properties can be certified on a per lot basis, available upon request

SUGGESTED OPERATING CONDITIONS

Maximum continuous temperature	
Free Base form	110˚F
Minimum bed depth	24 inches
Backwash expansion	25 to 50 percent
Maximum pressure loss	20 psi
Operating pH range	<9 SU
Regenerant Concentration	
Hydroxide cycle	1 to 6 percent NaOH
Regenerant level	3 to 8 lbs./cu.ft.
Regenerant flow rate.	0.5 to 1.0 gpm/cu.ft.
Regenerant contact time	>30 minutes
Displacement flow rate	Same as dilution water
Displacement volume	10 to 15 gallons/cu.ft.
Rinse flow rate	Same as service flow
Rinse volume	35 to 60 gallons/cu.ft.
Service flow rate	1 to 4 gpm/cu.ft.

Note: These guidelines describe average low risk operating conditions. They are not intended to be absolute minimums or maximums.
For operation outside these guidelines, contact ResinTech Technical Support

APPLICATIONS



Weak base resins are temperature and flow sensitive. The chart is based on 2 gpm/cu. ft. flow rate, temperature of 70˚F, a bed depth of 30 inches, and an endpoint of 20 kilohms resistivity (50 uS/cm). No engineering downgrade has been applied.

SINGLE USE APPLICATIONS

ResinTech WBG30 is ideal for single use applications because it has higher capacity than any other weakly basic anion resin. It can be used in disposable cartridges or in larger tanks where the resin is sluiced out when spent and replaced with fresh resin. Aries Filterworks, a division of ResinTech, can provide WBG30 in cartridges or tanks for a variety of single use applications.

CARTRIDGE USE

ResinTech WBG30 has higher capacity than any other weak base anion resin. The very high capacity makes WBG30 an ideal choice for cartridges. WBG30 is a granular rather than a spherical media.