# CG8-H-BL-NANO

Grade: Nano

**Strong acid black cation resin, styrene/DVB 8% crosslinked gel, nano grade, hydrogen form**

ResinTech CG8-H-BL-NANO is an 8% crosslinked gel strong acid cation resin in the hydrogen form. It has been functionally tested to produce >18 megohm resistivity and under 2 ppb of TOC (in a mixed bed using NANO grade anion resin). CG8-H-BL-NANO is intended for use in ultrapure applications where a low TOC cation resin is required and for ultrapure polishing mixed beds.

## FEATURES & BENEFITS

- Ultrapure performance
- Low TOC
- Lowest levels of inorganics

## APPLICATIONS

- Ultrapure Water Production (UPW)

## PHYSICAL PROPERTIES

| | |
|---|---|
| Polymer Matrix | Styrene/DVB |
| Polymer Type | Gel |
| Ionic Form (as shipped) | Hydrogen ($H^+$) |
| Functional Group | Sulfonic Acid |
| Physical Form | Spherical Beads |
| Uniformity Coefficient | 1.60 |
| Particle Size | 16-50 US mesh (297-1190µm) |
| < 50 mesh (300 µm) % | < 1% |
| Minimum Sphericity (%) | 93 |
| Reversible Swelling | 5 to 9% (Na → H) |
| Capacity (meq/mL) | 1.80 |
| Moisture Retention (%) | 47 to 56 |
| Shipping Weight | 49 - 51 lbs/cu.ft. (785 - 817 g/L) |
| Color | Dark Brown to Black |
| Regenerable | Regenerable |

## SUGGESTED OPERATING CONDITIONS

| | |
|---|---|
| Maximum Temperature | 265°F (129°C) |
| Minimum Bed Depth | 24 in. (61.0 cm) |
| Maximum Pressure Loss | 25 psi (172 kPa) |
| Backwash Expansion (%) | 25 to 50 |
| Operating pH Range | 0 to 14 |
| Flow Rate | |
| Working Service | 1-10 gpm/cu.ft. (8-80 BV/h) |



RESINTECH® INC.
INNOVATIONS IN ION EXCHANGE

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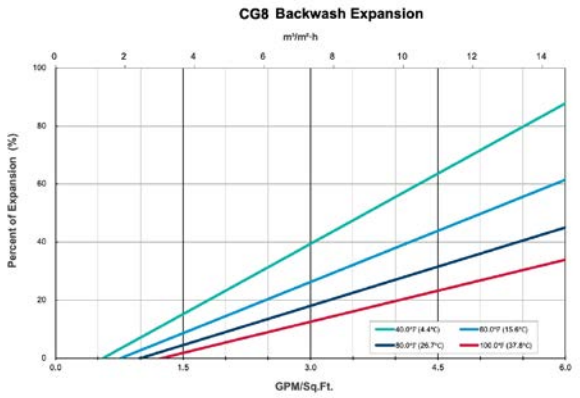
## REGENERATION DETAILS

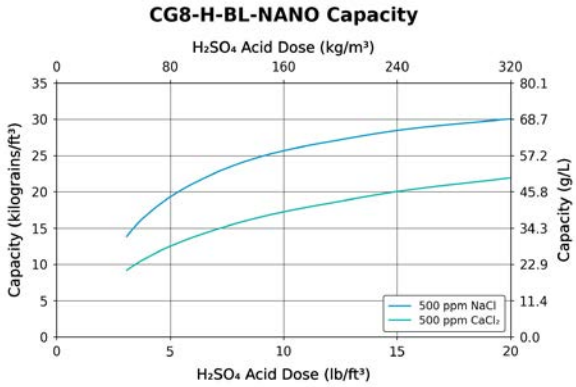
| | | | |
|---|---|---|---|
| Hydrogen Cycle (H2SO4) | 1 to 8% | Displacement Flow Rate | Same as dilution water |
| Hydrogen Cycle (HCl) | 5 to 10% | Displacement Volume | 10-15 gals/cu.ft. (1-2 BV) |
| Regenerant Level | 4-15 lbs/cu.ft. (64.1-240.3 g/L) | Rinse Flow Rate | Same as service flow |
| Regenerant Flow Rate | 0.5-1.5 gpm/cu.ft. (4-12 BV/h) | Rinse Volume | 35-60 gals/cu.ft. (5-8 BV) |
| Regenerant Contact Time | > 20 minutes | | |

## BACKWASH EXPANSION




The graph above shows the expansion characteristics of ResinTech CG8-H-BL-NANO as a function of flow rate at various temperatures.

## CAPACITY




Capacity and leakage data are based on the following: 2:1 Ca:Mg ratio, 500 ppm TDS as CaCO3, 0.2% hardness in the salt and 10% brine concentration applied co-currently through the resin over 30 minutes. No engineering downgrade has been applied.

## CERTIFICATIONS

REACH Registered

## PACKAGING

### *Standard*

42 cu.ft. Supersack | 7 cu.ft. Drum
200L Drum | 1000L Supersack

### *Metric*

1 cu.ft. Bag | 5 cu.ft. Drum
25L Bag | 140L Drum

### *Shipping Weight*

49 - 51 lbs/cu.ft. (785 - 817 g/L)



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## MATERIAL SAFETY DATA SHEETS (MSDS)

Material Safety Data Sheets (MSDS) are available for all products on the ResinTech website. They contain important health and safety information that may be needed to protect your employees and customers from any known health and safety hazards associated with our products. We recommend that you secure and study the pertinent MSDS for our products and any other products being used.

These suggestions and data are based on information we believe to be reliable. They are offered in good faith. However we do not make any guarantee or warranty. We caution against using these products in an unsafe manner or in violation of any patents; further we assume no liability for the consequences of any such actions.

Safety Data Sheets (SDS) are available at resintech.com



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