# PRODUCT SPECIFICATION SHEET



STRONG BASE ANION

CONDENSATE POLISHING GRADE

TYPE I ANION

POLYSTYRENIC GEL

HYDROXIDE FORM

ResinTech SBG1-OH-CP is a polisher grade type 1 gel strong base anion resin in hydroxide form. It offers high capacity and resistance to both thermal and chemical oxidation. It is a uniform particle size resin optimized for minimal pressure loss and perfect separation from "CP" grade cation resins. SBG1-OH-CP is ideally suited for high flow rate, deep bed condensate polishing applications when paired with either CG10-H-CP or SACMP-H-CP.

## **APPLICATIONS**

- Condensate Polishing
- Anion Component in Mixed Beds

TYPICAL PROPERTIES & PHYSICAL CHARACTERISTICS	
Polymer Matrix	Styrenic Gel
Ionic Form	Hydroxide
Functional Group	Trimethylamine
Physical Form	Spherical Beads
Particle Size	20 to 40 US Mesh (400 - 841 µm)
% < 50 mesh (300μm)	< 0.5%
Minimum Sphericity	95%
Uniformity Coefficient	1.2
Reversible Swelling	OH to CI -18% to -25%
Temp Limit	140°F (60°C)
	Limited life at elevated temperature of 212 deg°F (100 deg°c)
Capacity (meq/mL)	1.05
Moisture Retention	52% to 60%
Shipping Weight	41 - 43 lbs/ft³ (657 - 689 g/L)
Color	Yellow to Orange
Regenerability	Yes

# **PACKAGING OPTIONS**

- 1 ft³ bags
- 1 ft³ boxes
- 1 ft<sup>3</sup> drums
- 7 ft<sup>3</sup> drums
- 42 ft<sup>3</sup> supersacks

Revision 1.1 ResinTech, Inc.®



# SBG1-OH-CP

STRONG BASE ANION

# **CONDENSATE POLISHING GRADE TYPE I ANION POLYSTYRENIC GEL HYDROXIDE FORM**

#### **Pressure Loss** 3.0 40°F 2.5 60°F 80°F psi / ft. of Resin 100°F 2.0 1.5 1.0 0.5 0.0 15.0 20.0 5.0 10.0 0.0 gpm / sq.ft.

#### **Backwash Expansion** 100 40°F Percent of Expansion 60°F 80°F 100°F 60 40 20 0 3.0 4.0 0.0 1.0 2.0 gpm / sq.ft.

#### **CONDENSATE POLISHING**

SBG1-OH-CP is ideally suited for high pressure condensate polishing applications. It has very high capacity and provides long service life when treating condensates that contain traces of CO<sub>2</sub> and other anionic contaminants. SBG1-OH-CP has narrowly graded particle size to provide low pressure loss and help improve separation from CP grade cation resins.

## **MAXIMUM IMPURITIES**

#### **Anionic impurities**

Equivalent percent Chloride (% CI) < 1.5 Equivalent percent Sulfate (% SO<sub>4</sub>) < 1.5 Equivalent percent Hydroxide (% OH) > 95

# **Crush strength**

Service flow rate

Average, grams per bead > 350 Percent greater than 200 grams > 95

## SUGGESTED OPERATING CONDITIONS

Maximum continuous temperature Maximum intermittent temperature	140°F 180°F
Minimum bed depth	24 inches
Backwash expansion	25 to 50 percent
Maximum pressure loss	20 psi
Operating pH range	0 to 14 SU
Regenerant Concentration	
Hydroxide cycle	2 to 6 percent NaOH
Regenerant level	4 to 10 lbs./cu.ft.
Regenerant flow rate	0.25 to 1.0 gpm/cu.ft.
Regenerant contact time	>40 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.

Note: These guidelines describe average low risk operating conditions. They are not intended to be absolute minimums or maximums.

2 to 15 gpm/cu.ft.

For operation outside these guidelines, contact ResinTech Technical Support

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