



**Graver Technologies**

**Quality Department**

**GRAVEX®  
GC 3-1  
HYDROGEN/HYDROXIDE  
FORMS**

<b>SPEC NO</b>	GTS-31-SC
<b>REV NO</b>	1
<b>DATE</b>	October 17, 2001
<b>QA APPROVAL</b>	<i>Keith Platoff</i>

**PROPERTIES**

Resin Type

Functionality

Matrix

Cation : Anion Ratio

Total Exchange Capacity

Percent of Sites

Water Retention Capacity

Particle Size

Friability

Bead Integrity

Water Extractables

Shipping Weight

**SPECIFICATIONS**

Strongly Acidic Cation Exchange Resin

Strongly Basic Anion Exchange Resin

Sulfonic Acid

Quaternary Ammonium

Styrene-Divinylbenzene

1:1 Equivalents

1.90 meq/mL (Cation H Form) (min)

1.25 meq/mL (Anion OH Form) (min)

98% Hydrogen (min)

95% Hydroxide (min)

3.0% Chloride (max)

45-51% (Cation H Form)

42-49% (Anion Cl Form)

100% minus 14 mesh (min)

5% plus 16 mesh (max)

0.5% minus 50 mesh (max)

200 g / bead average (Cation) (min)

200 g / bead average (Anion) (min)

10% <100g/bead (Cation) (max)

10% <100g/bead (Anion) (max)

99.5% Whole Bead (Cation) (min)

99.5% Whole Bead (Anion) (min)

98% Whole Uncracked Bead (Cation) (min)

98% Whole Uncracked Bead (Anion) (min)

0.10% (max)

43 lbs./cu. ft. (689 g/L)