Safety Data Sheet
Product Names: SBG1, SBG1-HP, SBG1-UPS, SBG1-C, SBG1-F, SBMP1, SBMP1-UPS, GP-SBA, SBG1P, SBG1P-UPS
(Type I Strong Base Anion Exchange Resin Chloride Form)
Effective date February 23, 2018

Section 1: Identification

1a Product Names
ResinTech SBG1, SBG1-HP, SBG1-UPS, SBG1-C, SBG1-F, SBMP1, SBMP1-UPS, GP-SBA, SBG1P, SBG1P-UPS

1b Common Name
Type I Strong base anion resin in the chloride form.

1c Intended use
All general purpose anion exchanges for general use including salt form and demineralization.

1d Manufacturer
ResinTech, Inc.
Address 160 Cooper Road, West Berlin, NJ 08091 USA
Phone 856-768-9600
Email ixresin@resintech.com

Section 2: Hazard Identification

2a Hazard classification
Not hazardous or dangerous

<table>
<thead>
<tr>
<th>Product Hazard Rating</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health = 0</td>
<td>0 = Negligible</td>
</tr>
<tr>
<td>Fire = 1</td>
<td>1 = Slight</td>
</tr>
<tr>
<td>Reactivity = 0</td>
<td>2 = Moderate</td>
</tr>
<tr>
<td>Special – N/A</td>
<td>3 = High</td>
</tr>
<tr>
<td></td>
<td>4 = Extreme</td>
</tr>
</tbody>
</table>

2b Product description
White, yellow, or orange colored solid beads approximately 0.6 mm diameter with little or no odor.

2c Precautions for use
Safety glasses and gloves recommended. Slipping hazard if spilled.

2c Potential health effects
Will cause eye irritation. Will cause skin skin irritation. Ingestion is not likely to pose a health risk.

2d Environmental effects
This product may alter the pH of any water that contacts it.
Warning (contains ion exchange resin)

H320: Causes eye irritation (Category 2B)

Precautionary Statements

P264: Wash hands thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

P333+313: If skin irritation or a rash occurs: Get medical advice/attention.

P337+313: If eye irritation persists get medical advice/attention.

P403+233: Store in a well-ventilated place. Keep container tightly closed.

P411: Store at temperatures not exceeding 50 °C/ 122 °F.

Please refer to the safety data sheet for additional information regarding this product.

ResinTech, Inc.
160 Cooper Road
West Berlin, NJ 08091-9234
856 768-9600
Ixresin@resintech.com
Section 3: Composition/ Information on Ingredients

3a Chemical name
Trimethylamine functionalized chloromethylated copolymer of polystyrene in the chloride form.

3b Ingredients
- Trimethylamine functionalized chloromethylation copolymer of Styrene and divinylbenzene in the Chloride form
- Water

CAS# 60177-39-1 (35 - 65%)
CAS# 7732-18-5 (35 – 65%)

Section 4: First Aid Measures

4a Inhalation
No adverse effects expected- normal use of product does not produce odors or vapors.

4b Skin
Wash with soap and water - seek medical attention if a rash develops.

4c Eye contact
Wash immediately with water-seek attention if discomfort continues.

4d Ingestion
No adverse effects expected for small amounts, larger amounts can cause stomach irritation. Seek medical attention if discomfort occurs.

Section 5: Fire Fighting Measures

5a Flammability
NFPA Fire rating = 1

5b Extinguishing media
Water, CO2, foam, dry powder.

5c Fire fighting Procedures
Follow general fire fighting procedures indicated in the work place. Seek medical attention if discomfort continues.

5d Protective Equipment
MSHA/NIOSH approved self-contained breathing gear, full protective clothing.

5e Combustion Products
Carbon oxides and other toxic gasses and vapors.

5f Unusual Hazards
Product is not combustible until moisture is removed. Resin begins to burn at approximately 230º C. Auto ignition can occur above 500º C.
Section 6: Accidental Release Measures

6a Personal Precautions
Keep people away, spilled resin can be a slipping hazard, wear gloves and safety glasses to minimize skin or eye contact.

6b Incompatible Chemicals
Strong oxidants can create risk of combustion products similar to burning.

6c Environmental Precautions
Keep out of public sewers and waterways.

6d Containment Materials
Use plastic or paper containers.

6e Methods of Clean-up
Sweep up material and transfer to containers.

Section 7: Handling and Storage

7a Handling
Avoid prolonged skin contact. Keep resin moist and avoid allowing resin to completely dry.

7b Storage
Store in a cool dry place (0º to 45º C) in the original shipping container. This product is thermally sensitive and will have reduced shelf life if subjected to extended periods of time at temperatures exceeding 50º C. Although freezing does not usually damage ion exchange resins, avoid repeated freeze thaw cycles.

Section 8: Exposure Controls/Personal Protection

8a OSHA exposure limits
None noted.

8b Engineering Controls
Provide adequate ventilation.

8c Personal Protection Measures
Eye Protection
Safety glasses or goggles.

Respiratory Protection
Not required for normal use.

Protective Gloves
Not required for limited exposure but recommended for extended contact.
### Section 9: Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Amber, yellow, or red beads approx. 0.6 mm diameter.</td>
</tr>
<tr>
<td>Flammability or explosive limits</td>
<td>Flammable above 500º C</td>
</tr>
<tr>
<td>Odor</td>
<td>Little or no odor</td>
</tr>
<tr>
<td>Physical State</td>
<td>Solid</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>Near neutral (6 to 8 typical)</td>
</tr>
<tr>
<td>Relative density</td>
<td>Approx 710 grams/Liter</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Does not melt, freezes at approx. 0 C</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble in water and most solvents</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Does not boil</td>
</tr>
<tr>
<td>Flash point</td>
<td>Approx 500º C</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Does not evaporate</td>
</tr>
<tr>
<td>Partition Coefficient (n-octanol/water)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Approx 500º C</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Above 230º C</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### Section 10: Stability and Reactivity

| Section 10a Stability                         | Stable under normal conditions.                                              |
| 10b Conditions to Avoid                       | Heat, exposure to strong oxidants.                                           |
| 10c Hazardous by-products                     | Trimethylamine, charred polystyrene, aromatic acids and hydrocarbons, organic amines, nitrogen oxides, carbon oxides, chlorinated hydrocarbons. |
| 10d Incompatible materials                   | Strong oxidizing agents (such as HNO₃)                                      |
| 10e Hazardous Polymerization                 | Does not occur                                                              |
Section 11: Toxicological Information

11a Likely Routes of Exposure
Oral, skin or eye contact.

11b Effects of exposure
- Delayed: None known.
- Immediate (acute): None known.
- Chronic: None known.

11c Toxicity Measures
- Skin Adsorption: Unlikely, some transfer of acidity is possible.
- Ingestion: Oral toxicity believed to be low but no LD50 has been established.
- Inhalation: Unknown, vapors are very unlikely due to physical properties (insoluble solid).

11d Toxicity Symptoms
- Skin Adsorption: Mild Rash.
- Ingestion: Indigestion or general malaise.
- Inhalation: Unknown.

11e Carcinogenicity
None known

Section 12: Ecological information

12a Eco toxicity
Not acutely harmful to plant or animal life.

12b Mobility
Insoluble, acidity or causticity may escape if wet.

12c Biodegradability
Not biodegradable.

12d Bioaccumulation
Insignificant.

12e Other adverse effects
Not Harmful to the environment.
### Section 13: Disposal Considerations

<table>
<thead>
<tr>
<th>13a</th>
<th>General considerations</th>
<th>Material is non-hazardous.</th>
</tr>
</thead>
<tbody>
<tr>
<td>13b</td>
<td>Disposal Containers</td>
<td>Most plastic and paper containers are suitable.</td>
</tr>
<tr>
<td>13c</td>
<td>Disposal methods</td>
<td>No specific method necessary.</td>
</tr>
<tr>
<td>13d</td>
<td>Sewage Disposal</td>
<td>Not recommended.</td>
</tr>
<tr>
<td>13e</td>
<td>Precautions for incineration</td>
<td>May release trimethylamine and toxic vapors when burned.</td>
</tr>
<tr>
<td>13f</td>
<td>Precautions for landfills</td>
<td>Resins used to remove hazardous materials may then become hazardous mixtures</td>
</tr>
</tbody>
</table>

### Section 14: Transportation Information

<table>
<thead>
<tr>
<th>14a</th>
<th>Transportation Class</th>
<th>Not classified as a dangerous good for transport by land, sea, or air.</th>
</tr>
</thead>
<tbody>
<tr>
<td>14b</td>
<td>TDG</td>
<td>Not regulated.</td>
</tr>
<tr>
<td>14c</td>
<td>IATA</td>
<td>Not regulated.</td>
</tr>
</tbody>
</table>

### Section 15: Regulatory Information

<table>
<thead>
<tr>
<th>15a</th>
<th>CERCLA</th>
<th>Not regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>15b</td>
<td>SARA Title III</td>
<td>Not regulated</td>
</tr>
<tr>
<td>15c</td>
<td>Clean Air act</td>
<td>Not regulated</td>
</tr>
<tr>
<td>15d</td>
<td>Clean Water Act</td>
<td>Not regulated</td>
</tr>
<tr>
<td>15e</td>
<td>TSCA</td>
<td>Not regulated</td>
</tr>
<tr>
<td>15f</td>
<td>Canadian Regulations</td>
<td>Not a controlled product</td>
</tr>
<tr>
<td></td>
<td>WHMIS</td>
<td>Not regulated</td>
</tr>
<tr>
<td></td>
<td>TDG</td>
<td>Not regulated</td>
</tr>
<tr>
<td>15g</td>
<td>Mexican Regulations</td>
<td>Not Dangerous</td>
</tr>
</tbody>
</table>
Section 16: Other Information

The information provided in this safety data sheet is presented in good faith and believed to be accurate as of the effective data shown above. However, no warranty or guarantee of accuracy, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another. It is the buyer’s responsibility to ensure that their activities comply with federal, state, and local laws.

16a  Date of Revision       31 March 2015