Section 1: Identification

1a Product Name
ResinTech SBG1-OH, SBG1-OH-ULTRA, SBG1-OH-LTOC, SBG1-OH-SC, SBG1-OH-NG, SBG1-OH-UPS, SBG1-OH-CP, SBG1P-OH, SBG1P-OH NG, SBG1P-OH-SC, SBG1P-OH LTOC, SBG1P-OH UPS, SBG1P-OH-ULTRA, SBMP1-OH,SBMP1-OH-SC, SBMP1-OH-UPS, SBMP1-OH-CP, GP-SBA-OH

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

1c Intended use
All hydroxide for anion exchanges such as separate beds and mixed beds.

1d Manufacturer
ResinTech, Inc.
Address
1801 Federal Street
Camden, NJ 08105 USA
Phone
856-768-9600
Email
ixresin@resintech.com

Section 2: Hazard Identification

2a OSHA Hazard classification
Not hazardous or dangerous

2b Product description
Light cream to light yellow colored solid beads approximately 0.6 mm diameter with moderate to strong amine 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 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 hydroxide form anion exchange resin)

H315: Causes skin irritation (Category 2)
H319: Causes serious eye irritation (Category 2A)
H335: May cause respiratory irritation

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.
1801 Federal Street
Camden, NJ 08105 USA
856 768-9600
lxresin@resintech.com
Section 3: Composition/ Information on Ingredients

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

3b Ingredients
Trimethylamine functionalized chloromethylated copolymer of styrene and divinylbenzene in the hydroxide form
CAS# 69011-18-3 (35 - 65%)

Water
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. Amine vapors released in headspace above sealed containers can exceed recommended exposure levels for trimethylamine.

6b Incompatible Chemicals
Strong oxidants can create risk of combustion products similar to burning, exposure to strong acids can cause a rapid temperature increase.

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

6d Containment Materials
Use plastic or paper containers, unlined metal containers not recommended.

Section 7: Handling and Storage

7a Handling
Prolonged skin contact will cause burns due to causticity. Avoid contact with salts or with salty water to prevent premature exhaustion of the resin. 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>Moderate to strong amine 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>Basic when mixed with water</td>
</tr>
<tr>
<td>Relative density</td>
<td>Approx 680 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**

<table>
<thead>
<tr>
<th>Section 10: Stability and Reactivity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10a Stability</td>
<td>Stable under normal conditions.</td>
</tr>
<tr>
<td>10b Conditions to Avoid</td>
<td>Heat, exposure to strong oxidants.</td>
</tr>
<tr>
<td>10c Hazardous by-products</td>
<td>Trimethylamine, charred polystyrene, aromatic acids and hydrocarbons, organic amines, nitrogen oxides, carbon oxides, chlorinated hydrocarbons.</td>
</tr>
<tr>
<td>10d Incompatible materials</td>
<td>Strong oxidizing agents (such as HNO₃), strong acids (such as HCl, H₂SO₄ etc)</td>
</tr>
<tr>
<td>10e Hazardous Polymerization</td>
<td>Does not occur</td>
</tr>
</tbody>
</table>
### Section 11: Toxicological Information

**11a** Likely Routes of Exposure

Oral, skin or eye contact.

**11b** Effects of exposure

- **Delayed**
  - None known.
- **Immediate (acute)**
  - Rash or burn caused by causticity.
- **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**
  - Rash or burn.
- **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

13a General considerations  Material is non-hazardous. However, unused material can cause a pH increase when wetted.

13b Disposal Containers  Most plastic and paper containers are suitable. Avoid use of unlined metal containers.

13c Disposal methods  No specific method necessary.

13d Sewage Disposal  Not recommended.

13e Precautions for incineration  May release trimethylamine and toxic vapors when burned.

13f Precautions for landfills  pH of spent resin may be high. Resins used to remove hazardous materials may then become hazardous mixtures.

Section 14: Transportation Information

14a Transportation Class  Not classified as a dangerous good for transport by land, sea, or air.

14b TDG  Not regulated.

14c IATA  Not regulated.


Section 15: Regulatory Information

15a CERCLA  Not regulated

15b SARA Title III  Not regulated

15c Clean Air act  Not regulated

15d Clean Water Act  Not regulated

15e TSCA  Not regulated

15f Canadian Regulations  
WHMIS  Not a controlled product
TDG  Not regulated

15g Mexican Regulations  Not Dangerous
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 10 January 2020