Product name: IGLOO Cellulose®
Technical name: Loosely packed cellulosic wood fiber
State: Free flowing - wood base
Color: Gray
Odor: None
Dimensional Weight: 1.49 lbs/ft³ -- 23.4 kg/m³

pH: @25°C, 2% solution 7.8
Packaging: 25 lbs -- 11.3 kg / bag

Chemical Composition:
- Newsprint fiber C₆H₁₀O₃
- Boric acid H₃BO₃
- Natural additives for mold, dust and fire control
- Magnesium sulfate

Installation:
- IGLOO Cellulose® insulation high efficiency relies on air between the fibers, obtained when the cellulose expands during installation (whether hand-applied or blown).
- Clear up 1 ft² for every 300 ft² of ceiling of air intake.
- Apply in places where temperature does not exceed 194 °F (90 °C).
- Install 3” or more away from chimneys.
- Wear a respirator at all times.
- For soundproofing, contact an acoustical engineer.
- For wall insulation, apply enough product to achieve at least 3 lbs/ft³ (48 kg/m³) density. (Recommended 360HD Igloo wall cavity system)
- Do not apply on built-in-surface-mounted light fixtures without proper IC protection.

Product Registration:
Canadian Construction Materials Center (CCMC)
- Technical product sheet / CCMC #08532-L
- Technical product sheet / CCMC #12835-R (Walls)
- CAN / ULC - S703-09
- Product is guided by standard ASTM C-739, HHI-515-E and amended CPSC
- VOC Emission certificate #120120 - 03 (Berkeley Analytical)
- GREENGUARD GOLD Certification
Technique DataSheet

Installation Chart  (blown-applied over a horizontal surface)

<table>
<thead>
<tr>
<th>R</th>
<th>Applied Thickness</th>
<th>Thickness After Settling</th>
<th>Surface Mass</th>
<th>Coverage per Bag</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(in)</td>
<td>(in)</td>
<td>(lb/ft²)</td>
<td>(ft²)</td>
</tr>
<tr>
<td>12</td>
<td>3 1/2</td>
<td>3 1/4</td>
<td>0.40</td>
<td>61.0</td>
</tr>
<tr>
<td>20</td>
<td>6</td>
<td>5 3/8</td>
<td>0.65</td>
<td>36.6</td>
</tr>
<tr>
<td>32</td>
<td>9 1/2</td>
<td>8 5/8</td>
<td>1.05</td>
<td>23.0</td>
</tr>
<tr>
<td>40</td>
<td>12</td>
<td>10 3/4</td>
<td>1.30</td>
<td>18.3</td>
</tr>
<tr>
<td>50</td>
<td>15</td>
<td>13 3/8</td>
<td>1.69</td>
<td>15.4</td>
</tr>
<tr>
<td>60</td>
<td>18</td>
<td>16 1/8</td>
<td>2.05</td>
<td>12.2</td>
</tr>
</tbody>
</table>

**Thermal Resistance:**
- ASTM C 177 and ASTM C 518 tests
- \( R = 3.71 \text{ per inch} \)
- Example: RSI-7 = R-40

**Surface Combustion Specifications:**
- CAN/ULC-S102.2 tests
- Flame speed rating is lower than 150 (for loosely packed insulation)
- Equivalent: CAN/ULC-S-102 or ASTM E-84
- Equivalent flame spread rate is lower than 25

**Permanant Flammability Index:**
- ASTM E 970 test
- Surface flammability specifications show flame spread classification of at least 0.12 w/cm²
  Result are determined by electric radiant panel trial (ASTM E 970).

**Resistance to Combustion Without Flame**
- CAN/ULC-S130 test
- Less than 15% mass loss after being exposed to a high temperature.
- Fire will die out once the heat source is removed.

**Apsorption Rate:**
- Less than 20% absorption in a environment where humidity is higher than 90%, at 50°C temperature, during 168 hours.

**Corrosiveness:**
- ASTM G1-90 test
- Exposed @ 50°C for 28 days – No perforation
- Aluminium #3003 BARE – No perforation
- Copper #110 CABRA – No perforation
- Cold rolled low carbon steel – No perforation
- Galvanized steel, 40% zinc – No perforation

**Cryptogamic Resistance:**
- ASTM C 1338-96 test
- No mold (fungus) had appeared in a culture medium containing fungous spores (à 95% RH and 28°C temp.) after 28 days.

**Chemical Product Separation**
- Less than 1.5% chemical product separation after agitating at 275 cycles/min for 30 minutes