Thermo-12® Gold
PIPE & BLOCK INSULATION

DESCRIPTION
Thermo-12 Gold is a pre-formed, high temperature, abuse-resistant pipe and block insulation with exceptional structural strength, composed of hydrous calcium silicate for use on systems operating up to 1200°F (650°C). It is inorganic, noncombustible, Asbestos Free and meets or exceeds the physical and thermal property requirements of ASTM C533, Type 1. Integral to Thermo-12 Gold is, a distinctive formula and process that inhibits corrosion to outside surfaces of pipe and equipment.

ADVANTAGES
- Excellent resistance to damage enhancing the life of the system.
- Inhibits corrosion on carbon steel and stainless steel piping and equipment.
- Consistent thermal performance to 1200°F (650°C).
- Noncombustible Insulation.
- Structural strength protects against damage to lagging.
- Asbestos, Mercury and Lead Free.
- No organic binders; No loss of insulation integrity due to binder burn out.
- Large selection of sizes and forms.

APPLICATIONS
Thermo-12 Gold is the product of choice for high temperature pipe and equipment due to its high strength and durability, low thermal conductivity and corrosion inhibiting performance. Thermo-12 Gold is especially recommended for use in the petrochemical, power generation and process industries where piping and equipment operating up to 1200°F (650°C). The corrosion inhibiting properties are not diminished by temperature cycling so the corrosion protection will continue for the life of the product. Thermo-12 Gold will not burn and may be used as a component in fire protection systems in the some applications. Please visit our website at www.iig-ll.com for specific application information.

FIRE SAFETY
Surface Burning Characteristics. When tested in accordance with ASTM E84, NFPA 255, and UL 723, Thermo-12 Gold has flame spread/smoke developed ratings of 0/0.

Non Combustible. When tested in accordance with ASTM E136 as defined by NFPA 255 and NFPA 101.

ADDITIONAL INFORMATION AND MSDS
Please visit our website at www.iig-ll.com.
Thermo-12® Gold PIPE & BLOCK INSULATION

THERMAL CONDUCTIVITY *

<table>
<thead>
<tr>
<th>Mean Temperature</th>
<th>°F</th>
<th>100</th>
<th>200</th>
<th>300</th>
<th>400</th>
<th>500</th>
<th>600</th>
<th>700</th>
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<tbody>
<tr>
<td>°C</td>
<td></td>
<td>38</td>
<td>93</td>
<td>149</td>
<td>204</td>
<td>260</td>
<td>316</td>
<td>371</td>
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<tr>
<td>Btu in/(hr ft² °F)</td>
<td></td>
<td>.37</td>
<td>.41</td>
<td>.45</td>
<td>.49</td>
<td>.55</td>
<td>.60</td>
<td>.67</td>
</tr>
<tr>
<td>W/m °C</td>
<td></td>
<td>.053</td>
<td>.058</td>
<td>.064</td>
<td>.071</td>
<td>.079</td>
<td>.087</td>
<td>.096</td>
</tr>
</tbody>
</table>

*Thermo-12 Gold Pipe & Block Insulation as tested in accordance with ASTM C177, ASTM C518 and ASTM C335.

PRODUCT CERTIFICATION

When ordering material to comply with any government specification or any other listed specification, a statement of that fact must appear on the purchase order. Government regulations and other listed specifications require specific lot testing, and prohibit the certification of compliance after shipment has been made. There may be additional charges associated with specification compliance testing. Please refer to IIG-CSP-3 for Certification Procedures and Charges. Call customer service for more information.

ISO 9000 CERTIFICATION

Thermo-12 Gold is designed, manufactured, and tested in our own facilities, which are certified and registered to stringent ISO 9000(ANSI/ASQ 90) series quality standards. This certification, along with regular independent third-party auditing for compliance, is your assurance that this product delivers consistent high quality.

Industrial Insulation Group, LLC is a Johns Manville company. IIG manufactures MinWool-1200® mineral fiber pipe, block and a variety of other insulations; Thermo-12® Gold Calcium Silicate pipe and block insulation; Super Firetemp® fireproofing board; SprouleWR-1200® Perlite pipe and block insulation; high temperature adhesives, and insulating finishing cement.

The physical and chemical properties presented herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Numerical flame spread and smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Check with the Customer Service Office to assure current information. All Industrial Insulation Group products are sold subject to the IIG Limited Warranty and Limitation of Remedy. For a copy of the IIG Limited Warranty and Limitation of Remedy, email - info@iig-llc.com.

CUSTOMER SERVICE,
TECHNICAL & GENERAL INFORMATION
(800) 866-3234

www.iig-llc.com

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