NORCOAT® LIÈGE

THERMAL PROTECTION PRODUCT LINE

- Norcoat® Liège
- Norcoat® 4000
- Norcoat® 4011
- Norcoat® 5000
- Prosial® 2000
- Asterm®
- Norcoat® Flex

Cork based ablative thermal protection
NORCOAT® LIEGE
Cork based ablative thermal protection

Arianegroup has been developing and manufacturing thermal protection for Space Application for over 40 years and is recognized as an European leader. Our range of manufacturing processes allows many designs to protect the structures: Bonding, Moulding or Spraying.

Our product:

- **Easily Machinable**: Available in plates, or pre-cut kitting (2D) or in shape (3D)
- **High thickness** available
- **Fungicide included (F)**: No shelf life – stability over time
- **Fire proof (FI)**
- **Water repellent (FIH)**
- **Defense and Space qualified**: Ariane5, Mars entry, Ariane 6 ready, Military launchers
- Can be **coated** (Antistatic paint e.g.)
- **Composite** and **Metallic** substrates
- **2000°** material

<table>
<thead>
<tr>
<th>Characteristics</th>
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<tbody>
<tr>
<td>Density</td>
<td>0.47</td>
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<tr>
<td>Thermal Conductivity at 20°C</td>
<td>0.09 W.m⁻¹.K⁻¹</td>
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<tr>
<td>Specific heat at 150°C</td>
<td>1.8 kJ.kg⁻¹.K⁻¹</td>
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<td>Tensile stress</td>
<td>0.7 MPa</td>
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<tr>
<td>Elongation</td>
<td>6%</td>
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<tr>
<td>Dimensions</td>
<td>1210 mm x 680 mm</td>
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<tr>
<td>Thickness</td>
<td>1 to 120 mm</td>
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<tr>
<td>Heat flux</td>
<td>2 MW/m²</td>
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NOTE: Data in this document is for information purposes only.

**ADVANTAGES**

**Excellent heat performances**

**Material adaptability**
- Thin-skin is ideal for confined spaces
- Lightweight materials

**Manufacturing process adaptability**

**Material stability**
- Mechanical stability: materials paired with all support types
- Stability over time: 20-years life cycle for temperatures of between -50°C and 200°C

**Fully adapted solutions**
- Need analysis
- Material definition and manufacturing
- Technical product support
- Durables supply with adaptation to new standards

**CONTACT**

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