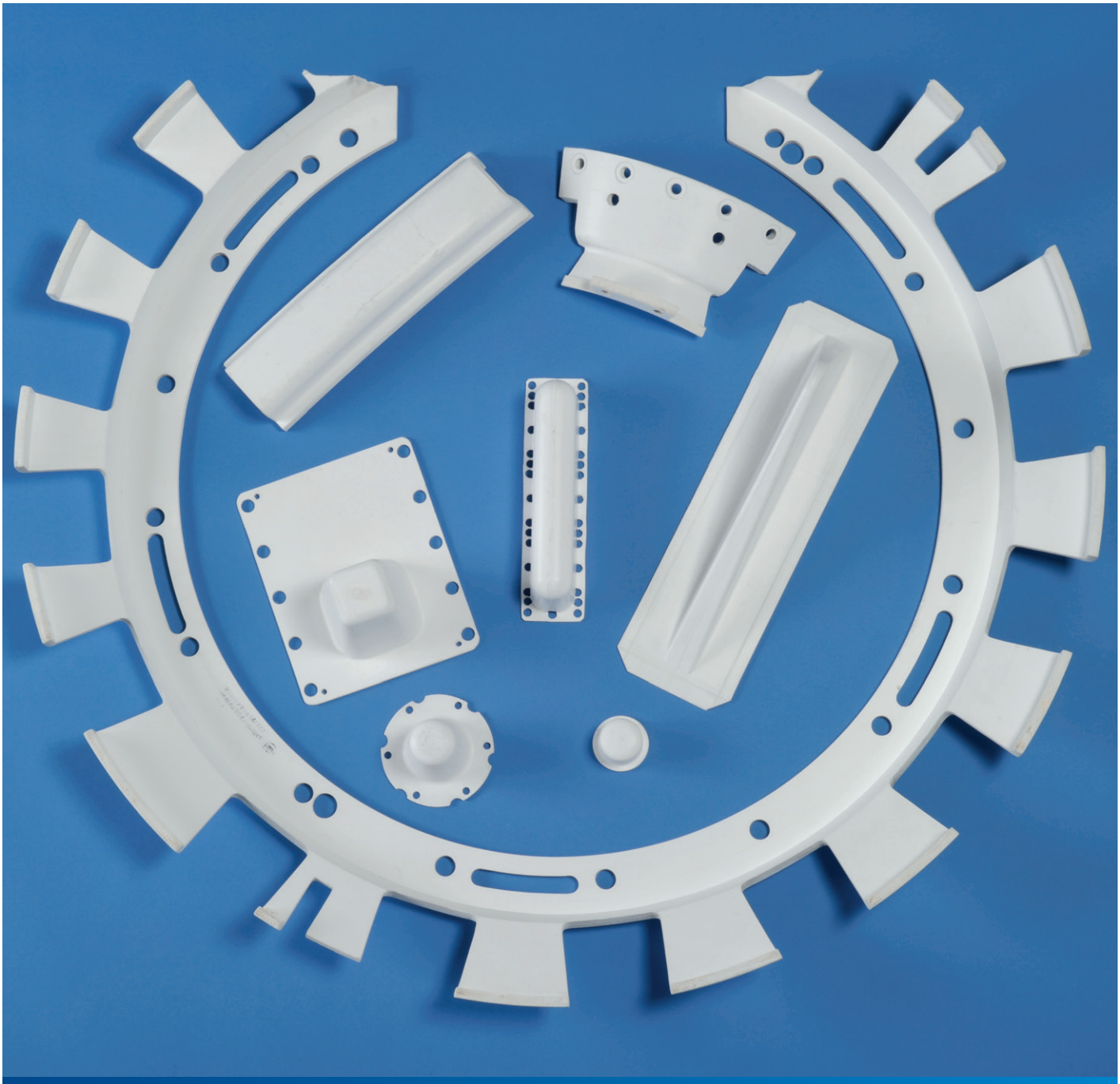
arianeGROUP



NORCOAT® 4011

THERMAL PROTECTION PRODUCT LINE

- NORCOAT® LIÈGE
- NORCOAT® 4000
- **NORCOAT® 4011**
- NORCOAT® 5011
- PROSIAL® 2000
- ASTERM®
- NORCOAT® FLEX
- NAXECO® PYC
- NAXECO® RESIN

THERMAL PROTECTIONS SUITABLE FOR ANTENNAS AND HIGHLY LOADED PARTS

NORCOAT® 4011

SUITABLE FOR ANTENNAS AND HIGHLY LOADED PARTS

ArianeGroup has been developing and manufacturing thermal protection for space applications 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.

CHARACTERISTICS	
Density	Up to 0.9
Thermal Conductivity at 150°C	0.24 $W \cdot m^{-1} \cdot K^{-1}$
Specific heat at 50°C	1.30 $kJ \cdot kg^{-1} \cdot K^{-1}$
Permittivity at 2 Ghz	2.3
Tensile stress	2 MPa transverse 20 MPa (along fibers)
Elongation	7%
Thickness	1 to 50 mm
Heat flux	1 MW/m^2 1500°C

NOTE:
Data in this document is for information purposes only.

Our product:

- **Moldable silicon** based ablative thermal protection
- **Direct molding** onto the part to be protected available
- **Plates or 3D complex parts**
- **Radio transparency:** suitable for antennas
- **Mechanical resistance** (fabric reinforced)
- **1000°C** material

ISO 9001 EN 9100 BUREAU VERITAS Certification

EN 9100:2018 BUREAU VERITAS Certification

AQAP 2110 BUREAU VERITAS Certification

COMPLIANT · COMPLIANT REACH

ADVANTAGES

Excellent heat performances

Material adaptability

- Thin-skin is ideal for confined spaces
- Lightweight materials

Manufacturing process adaptability

- May be bonded or attached mechanically
- Precisely contours all shapes
- Answer to a complex manufacturing demand

Material stability

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

Fully adapted solutions

- Need analysis
- Material definition and manufacturing
- Technical product support
- Durable supply with adaptation to new standards

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