

Kaowool 1400 paper



DESCRIPTION

Kaowool 1400 Paper is manufactured from high purity refractory fibres and designed for high temperature insulation. Advanced production techniques ensure uniform fibre distribution and close control of thickness and density.

Kaowool 1400 Paper is produced from Alumina-Silicate fibres with the minimum addition of carefully selected bonds, which burn out cleanly in service. Kaowool 1400 Paper exhibits excellent strength, flexibility and good handling characteristics. Other beneficial properties include low thermal conductivity, low thermal mass and exceptionally high thermal shock resistance

TYPE

Refractory Ceramic Fibre Paper.

CLASSIFICATION TEMPERATURE

1400°C

The maximum continuous use temperature depends on the application. In case of doubt, refer to your local Morgan Thermal Ceramics distributor for advice.

www.morganadvancedmaterials.com

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Main Properties

| | | |
|--|-------------------|-------|
| Classification Temperature | °C | 1400 |
| Typical Physical Properties | | |
| Colour | | White |
| Density | kg/m ³ | 210 |
| Melting point (minimum) | °C | 1760 |
| Tensile strength | kN/m ² | 750 |
| Thickness measurement pressure | kPa | 10 |
| High Temperature Performance | | |
| Binder content/loss on ignition | % | 6 |
| Shrinkage (24 hours at 1260°C) | % | 3 |
| Thermal conductivity (BS 1902 Part 6) at mean temperature of | | |
| 400°C | W/m.K | 0.089 |
| 600°C | W/m.K | 0.132 |
| 800°C | W/m.K | 0.197 |
| 1000°C | W/m.K | 0.293 |
| 1200°C | W/m.K | 0.436 |

| Chemical composition | | |
|--------------------------------|---|----|
| Al ₂ O ₃ | % | 47 |
| SiO ₂ | % | 52 |
| Other oxides | % | 1 |

| Acoustic absorption coefficient (BS 3638) - 2.0mm thickness: | |
|--|-------------|
| Frequency/ HZ | Coefficient |
| 100 | 0.05 |
| 500 | 0.02 |
| 1000 | 0.07 |
| 2000 | 0.26 |
| 4000 | 0.50 |

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Indicative heat loss table:

| Hot face | Insulation Thickness/mm | | | | |
|----------|-------------------------|-------|-------|-------|-------|
| | 0.5mm | 1.0mm | 2.0mm | 4.0mm | 8.0mm |
| 538°C | 400 | 335 | 268 | 202 | 145 |
| 649°C | 471 | 395 | 316 | 239 | 172 |
| 760°C | - | 456 | 364 | 276 | 200 |
| 871°C | - | 516 | 413 | 315 | 229 |
| 982°C | - | - | 462 | 353 | 258 |
| 1093°C | - | - | 510 | 393 | 290 |
| 1204°C | - | - | - | 433 | 321 |
| 1260°C | - | - | - | 453 | 337 |

Combustibility

Alumino-silicate refractory fibres are non-combustible when tested in accordance with BS 476, Part 4.

Availability and Packaging

Thicknesses available: 0.5mm, 1mm, 2mm, 3mm, 4mm, 5mm & 6mm Standard roll widths: 500mm, 610mm, 1000mm & 1220mm.

The values given herein are typical 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. Therefore, the data contained herein should not be used for specification purposes. Check with your Thermal Ceramics office to obtain current information.

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