

TECHNICAL DATA SHEET

P84 / Fiberglass Composite Needle Felt FMS

Fiberglass base, needle-felt composite with a high-temperature surface layer

DESCRIPTION

Fiberglass composite for the extreme-temperature class. Near-zero thermal shrinkage at high temperature with the strength of a needle felt, for duties where a synthetic felt would shrink and a woven cloth would not clean.

TYPICAL APPLICATIONS

Glass furnace exhaust · cement kiln clinker cooler · aluminium smelting · carbon black production.

PHYSICAL & MECHANICAL PROPERTIES

| PROPERTY                       | UNIT                   | TYPICAL VALUE   | TEST METHOD                         |
|--------------------------------|------------------------|-----------------|-------------------------------------|
| Mass per unit area             | g/m <sup>2</sup>       | 900 ± 50        | ISO 9073-1 / GB/T 24218.1           |
| Thickness                      | mm                     | 2.2 – 2.8       | ISO 9073-2 / GB/T 24218.2           |
| Air permeability               | L/dm <sup>2</sup> /min | 200 – 350       | ISO 9237 / GB/T 5453, @ 200 Pa      |
| Breaking strength, warp / weft | N                      | ≥ 1800 / ≥ 2000 | ISO 13934-1 / GB/T 3923.1           |
| Thermal shrinkage              | %                      | < 0.5           | 3 h at rated continuous temperature |

SERVICE TEMPERATURE & CHEMICAL RESISTANCE

|                        |                        |
|------------------------|------------------------|
| CONTINUOUS<br>≤ 260 °C | PEAK / SURGE<br>280 °C |
|------------------------|------------------------|

Acid ★★★

★★★ excellent · ★★ good · ○ limited

**Note.** The rating above is for the P84-surfaced composite. A composite whose surface layer is PPS is limited by that layer (≤ 190 °C continuous, ≤ 160 °C in high-oxygen gas); please confirm the grade on enquiry.

SURFACE TREATMENTS AVAILABLE

PTFE / graphite / silicone impregnation available — please specify on enquiry

SUPPLY

Supplied as roll goods or as finished filter bags made to the customer's drawing — any diameter and length, with snap-ring, sewn cuff or clamp-band top and a choice of bottom construction. Cages, venturis and accessories can be supplied with the bags. Please refer to the corresponding filter-bag data sheet.