

Data Sheet

Luminex™ 880 (Mac-M0880S)

Description

A porous magnesia ceramic, containing a *minimum* 88.0% MgO, plus the following *maximum* levels of other components: 8.5% SiO₂, 3.0% CaO, 0.29% Al₂O₃, 0.2% Fe₂O₃ and 0.02% B.

Prime Features:

- Consistent electrical performance at temperatures up to 800C
- Excellent thermal conductor at elevated temperatures
- Excellent electrical resistance across temperature range
- Made from 100 per cent electrofused magnesium oxide

Specifications

- Quality Assurance to ISO 9002

Physical Properties

Colour	Buff	
Bulk Density (fired)	2.4 Mg/m ³	
Porosity (open)	30% apparent	
Compressive Strength	40 MPa	
Flexural Strength (3-point)	15 MPa @20C	
Thermal Expansion Coefficient 10 ⁻⁶ /C	@20-1000C	13
Thermal Downshock σC	500	
Maximum operating temperature	800 C	
Volume resistivity	@600C	> 10 ⁹

Please note that all values quoted are based on test pieces and may vary according to component design. These values are not guaranteed in anyway whatsoever and should only be treated as indicative and for guidance only.

Typical Applications:

- Domestic and industrial electrical equipment
- Crushable bushes for electrical insulation at high temperature
- Insulating material for thermocouples
- Heat conductive fillers

Production Capabilities:

- Manufacture to close tolerances
- Prototype, batch and volume production

Morgan Advanced Materials is a global materials engineering company which designs and manufactures a wide range of high specification products with extraordinary properties, across multiple sectors and geographies. From an extensive range of advanced materials we produce components, assemblies and systems that deliver significantly enhanced performance for our customers' products and processes. Our engineered solutions are produced to high tolerances and many are designed for use in extreme environments.

We design and manufacture products for demanding applications in a variety of markets using a comprehensive range of advanced ceramic, glass, precious metal, piezoelectric and dielectric materials. We utilise core competences of applications engineering and superior materials technology, together with state of the art fully integrated manufacturing processes to offer precision ceramic components, ceramic-to-metal assemblies and special coatings for use in a variety of applications.