



TECHNICAL INFORMATION - Minerelle™ cast sheet

PHYSICAL INFORMATION

PROPERTY	TEST METHOD	TYPICAL VALUE
Density	ISO 1183 BS 2782 method 620A	1.75 g/cm ³
Tensile Strength	ISO 527 BS 2782 method 322	28 MPa
Tensile Modulus	ISO 527 BS 2782 method 322	3500 MPa
Tensile Elongation	ISO 527 BS 2782 method 322	0.8%
Flexural Strength	ISO 178 BS 2782 method 335A	50 MPa
Flexural Modulus	ISO 178 BS 2782 method 335A	9800 MPa
Izod Impact Strength	ISO 180 BS 2782 method 350	13 J/m
Barcol Hardness	ASTM D2583	60
Rockwell Hardness	ISO2039-2 BS 2782 method 365C	M94
Brinell Hardness	BS 240	400 (Est)
Coefficient of Expansion	ASTM D696	4.1 x 10 ⁻⁵ per °C
Heat Distortion Temperature	ASTM D648	100°C
Thermal Conductivity	BS 874	0.9 W/m °C
Dielectric Strength	BS 2782 method 221	7kV/mm
Surface Resistivity	BS 2782 method 231A	3.0 x 10 ¹² Ω
Abrasion Resistance	NEMA LD3.1	0.1g/100 rev.
Boiling Water Resistance	EN 438/2 test 7	0.1% mass increase zero thickness increase
Dry Heat Resistance	EN 438/2 test 8	No effect on 180°C
Falling Ball Impact Resistance	EN 438/2 test 12	>2.0m (12mm thick)
Scratch Resistance	EN 438/2 test 14	3.0N
Light Fastness	EN 438/2 test 16	>6
Cigarette Resistance	EN 438/2 test 18	Slight stain, removable with abrasive cleaner
Steam Resistance	EN 438/2 test 24	No effect
Radioactive Decontamination	BS 4247 Part 1	Factor 76
Fungi and Bacteria	ISO 846-1978 (E)	No effect

FIRE PERFORMANCE

Minerelle™ Cast Sheet has been tested to BS 476 : Parts 6 and 7, and achieves a Class 0 rating in accordance with the UK Building Regulations.

Surface Spread of Flame	BS 476 Part 7	Class 1
Fire Propagation	BS 476 Part 6	I = 3.9, i1 = 0
Epiradiateur	NF P 92-501	6mm M2, 12mm M1
Smoke/Toxicity	NF F166-101/102	Class FO
Toxicity Index	NES 713	1.7
Brandsschacht	DIN 4102	Class B1

FOOD CONTACT

Minerelle™ Cast Sheet has been tested in accordance with the German LGA and American NSF Requirements and certified as suitable for food contact applications.

TECHNICAL INFORMATION

CHEMICAL RESISTANCE

Group 1

The following chemicals can be left in contact with Minerelle™ Cast Sheet for prolonged periods (tested for a minimum of 16 hours) with no effect other than a possible slight surface mark which can be removed with detergent solution and scouring pad.

Acetic Acid	Ethanol	Potassium nitrate
Acetone	Ethyl acetate	Potassium carbonate
Aluminium hydroxide	Ether	Potassium bromate
Ammonium hydroxide	Formic acid (< 10%)	Petrol
Ammonia (35%)	Formaldehyde	Paraffin
Amyl Acetate	Glycerine	Sodium chloride
Alcohol	Glycerol	Sodium hydroxide (< 10%)
Barium hydroxide	Hydrochloric acid (<10%)	Sodium carbonate
Benzene	Hydrogen peroxide	Sodium Nitrate
Benzoic acid	Lactic acid	Sodium Sulphate
Bleach	Magnesium carbonate	Sulphuric acid (< 10%)
Butyl Acetate	Magnesium sulphate	Toluene
Calcium hydroxide	Magnesium chloride	Trichloroethane
Calcium hypochlorite	Methanol	Uric acid
Citric acid	Methylene chloride	White spirit
Calcium carbonate	Nitric acid (< 10%)	Xylene
Calcium chloride	Phosphoric acid (< 10%)	Zinc sulphate
Copper sulphate		
Carbon tetrachloride		
Chromic acid		
Dioxane		

Group 2

Prolonged contact with the following chemicals may produce a moderate to heavy stain which can, however, be removed with a scouring pad and abrasive cleaner, or with wet and dry sandpaper.

Bromine	Nigrosine
Chloroform	Nitric acid (> 10%)
Formic acid (> 10%)	Perchloric acid
Furfural	Phenol
Glacial acetic acid	Phosphoric acid (> 10%)
Gentian violet	Potassium permanganate
Hydrochloric acid (10%)	Silver nitrate
Hydrofluoric acid	Sulphuric acid (> 10%)
Iodine	Sodium acid (> 10%)
Mercurochrome	