

BIO | CLAD®

PHYSICAL DATA INFORMATION



THE QUEEN'S AWARDS
FOR ENTERPRISE:
2017

Physical Characteristics	Specific Gravity	ASTM D792	g/cm ²	1.4
	Rockwell Hardness	ASTM D785	R-Scale	R115
Mechanical Properties	Tensile Strength	ASTM D638	Kgf/cm ²	600
	Elongation	ASTM D638	%	100
	Bending Strength	ASTM D790	Kgf/cm ²	1,000
	Youngs Modulus of Elasticity	ASTM D790	Kgf/cm ²	34,000
	Impact Resistance (Izod)	ASTM D256	Kgfc/cm ²	5.0
Thermal Properties	Heat Distortion Temperature	ASTM D648	°C	60
	Coefficient of Linear Expansion	ASTM D696	cm/cm °C	7.0x10 ⁻⁵
	Dielectric Breakdown Voltage	ASTM D149	kv/mm	22-35

CHEMICAL RESISTANT PROPERTIES

NAME OF CHEMICAL	TEMP C	NAME OF CHEMICAL	TEMP C
Hydrochloric Acid 35%	20 40 60	Petrol	20 40 60
Sulphuric Acid 60%	V V V	Glycerine Nitric Acid	V V V
Nitric Acid 70%	V V V	Solution of Spraying Paint	P P P
Formic Acid	V G P	Chlorine Gas	P P P
Lactic Acid	V V V	Ammonia/Other Waste Gases	V V G
Caustic Soda	V V V	Natural Gas	V V -
Ammonia Water	V V V	Coal Gas	G G -
Sodium Disulphide	V V P	Bleaching Solution	V V -
Acetone	P P P	Electro-Plating	V V G
Ethyl Alcohol	V V G	Developing (Liquid for Photog)	V V -
Butyl Alcohol	V G G	Sea Water / Salt Water	V V V
Benzene	P P -	Fermented Alcohol	V G
Formalin	V V G	Starch (Carbohydrate) Solution	V V V
Carbon Disulphide	P P -	Brewing Water	V V V

REMARKS	V	Denotes safely applicable (absolutely corrosion resistant)
	G	Denotes applicable (corrosion resistant)
	P	Denotes inapplicable

BioClad is suitable for cladding in food preparation areas such as dairies, abattoirs and bakeries. This has been confirmed by the Ministry of Food, Fisheries and Agriculture and also local Health Authorities.

BioClad meets the following regulations:

STATUTORY INSTRUMENTS 1172 – 1970 – Food Hygiene (General) Regulations 1920

STATUTORY INSTRUMENTS 2037 – 1992 – Fresh Meat Regulations 1992

Milk and Dairies Regulations 1959 No 277

ISO 22196:2011

ASTM E84, EN 13501-12007 + A1:2009 C-s1-d0, BS 476 part 6 clas '0', part 7 class '1', AS/NZS 3837:1998

BioClad: This material is impact resistant to a wide variety of shocks, offering resistance to a wide range of chemicals including alkalis, acids, alcohols etc. as well as powerful resistance to salt air and aggressive industrial environment. Minimal water absorption means that steam cleaning to a maximum temperature of 60 C and power hosing will have no effect, and micro organisms and rodents present no difficulty. The material has obtained a Fire rating "Class 1" BS 476 Part 7 1971

"Surface Spread of Flame" and has also been tested in France "Class 1" for all thicknesses from 0.8 to 6.00mm

(LSTB-LNAMSTELF, PARIS).

The material should be cleaned by using warm soapy water, or stubborn stains and marks may cleaner such as Cif (Jif). PVC Cream of Solvent cleaners are also available if required.

BioClad contains silver phosphate glass antimicrobial technology to preserve the surface and prevent degradation caused by microbial growth. Biocide certified by ECHA, FDA and the EPA. BDR compliant. Antimicrobial is an additional line of defence beyond antibacterial with the power to kill fungi, microbes and protozoans as well as bacteria. BioClad's antimicrobial comes with a lifetime guarantee. BioClad's antimicrobial additive is HACCP registered.

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