

Test Result and Certificates Overview

Test	Standard		Test Authority	Date	Report ID	Result				Remarks	
Emittance	DIN-EN12898-2019-06	Determination of Emisisty	ICT, Germany	15/02/2021	202012105-15	Product	Emittance			low emission means also low absorption, i.e. high reflection	
						MIG-ESP Interior	0.143				
						MIG-ESP Exterior	0.315				
VOC	EN16516 ISO 16000 ATSM D5116-10	Assessment of release of dangerous substances - Determination of emissions into indoor air method for determination of VOC Determinations of Organic Emissions From Indoor Materials/Products	Eurofins Product Testing, Denmark	8/07/2020	Batch 2020-05-11	Product	after 28 days [$\mu\text{g}/\text{m}^3$]	Class	Limits		
						MIG-ESP Anti Microbial	Total VOC	5	A+	max 1000 $\mu\text{g}/\text{m}^3$ for A+	
						MIG-ESP Interior	Total VOC	55	A+	max 1000 $\mu\text{g}/\text{m}^3$ for A+	
						MIG-ESP Anti Microbial	Formaldehyde	<3	A+	max 10 $\mu\text{g}/\text{m}^3$ for A+	
						MIG-ESP Interior	Formaldehyde	17	A	max 60 $\mu\text{g}/\text{m}^3$ for A	
Dew Point	HG/T 4560-2013	method for the anti-condensation performance of paints	China Academy for Building Materials	15/01/2017	LJZ2016H027	Test category	Initial Dew Point [min]	Amount of Dew [g]			
						1 (low)	n/a	0			
						2 (high)	24	14.35			
Fire Resistance	EAD 350140-00-1106, Edition Sept 2017; EN13501-1	European Technical Assessment	Deutsches Institut fuer Bautechnik/Approval Body for construction Products and types of construction	7/12/2020	ETA 20/0745	MIG HRP, Heat Resistant Protector	Reaction to Fire	Class A1 in accordance with EN 13501-1			
Certificate for Healthy Housing	Healthy Housing Environment 40 [2002] Issue 4 in the version of 01.03.2015,		Society of Healthy Housing Environment, Construction Hygiene and Indoor Toxicology	17/08/2017		MIG ESP Interior	Certificate granted				
VOC	DIN-ISO 16000-6 DIN-ISO 16000-3		ECO Institute, Germany	26/03/2013	39364-001 (III)	Product	after 3 days [$\mu\text{g}/\text{m}^3$]	after 3 days [$\mu\text{g}/\text{m}^3\text{h}$]	after 28 days [$\mu\text{g}/\text{m}^3$]	after 28 days [$\mu\text{g}/\text{m}^3\text{h}$]	
						MIG ESP Interior	CMR - VOC	not detected	n.d.	not detected	n.d.
							Total VOC	2734	1367	8	4
							Total SVOC	1	1	not detected	n.d.
							Total VVOC	5	3	3	2
						Product	after 3 days [ppm]	after 28 days [ppm]			
MIG ESP Interior	Formaldehyde	0.071		0.019							
	Acetaldehyde	3		not detected							
LEEDs Product Declaration	Green Seals Standard GS 11	Leeds 2009 New Construction and Major Renovations NC&CS	ICT, Germany			Category	Result	LEED Credit			
						Recycled Content	14.40%	MR Credit 4	1-2 Pts		
						VOC Content	<1 g/l	IEQ Credit 4.2	1 Pt	APAS D181 "very low VOC" < 5g/itr	
Effect on Temperature	Report on Comparative Measurements of Indoor Climate in Two Test Chambers Coated with Different Paints		University of Applied Science Berlin/Fulda, Germany	7/05/2006	Prof. Mx/P	Heat Loss improvement	40.91%			the test was temperature based, i.e. to deduce related energy savings can only be indicative.	
Fire Resistance	DIN4201 part 1	Fire Behaviour	Pruefinstitut Hoch, Fladungen, Germany	18/11/2018	PZ-Hoch -200414	MIG ESP Interior	Class 2				
Anti Microbial	ISO 22196	Measurement of antibacterial activity	Quality Labs Bio Material Testing, Nuernberg, Germany	2/12/2019	3485.2 3485.1	Product	Test Germ	LOG reduction	reduction		
						MIG Interior	Escherichia coli	>4	>99.99%		
							MIG Anti Microbial	DSM 1576	>4	>99.99%	
							MIG Interior	Staphylococcus aureus DSM 21979	>4	>99.99%	
							MIG Anti Microbial		>4	>99.99%	
Anti Microbial	T/CADBM 35-2021 JC/T 2039-2010	Antimicrobial Coating for Hospitals	National Center of Quality Supervision & Test of Building Materials and Structure Safety	2/04/2021	WT2021B038000036	Product	Test Germ	Anti-microbial Performance requirement	result	Anti-microbial Durability requirement	result
						MIG Anti Microbial	Staphylococcus aureus	>99	99.36%	>97	98.86%
							Escherichia coli	>99	99.94%	>97	97.24%
							Klebsiella pneumoniae	>97	99.83%	>95	99.21%
							Pseudomonas aeruginosa	>97	99.67%	>95	99.39%
							Candida albicans	>90	99.22%	>85	95.65%
UV Test	DIN EN ISO 11507 DIN EN 1062-11 DIN EN ISO 4628-1 DIN EN ISO 4628-3 DIN EN ISO 4628-4 DIN EN ISO 4628-5 DIN EN ISO 4628-7	artificial weathering degeneration of coatings Changes in Appearance Blistering cracking Flaking Chalking	ILF Forschungs- und Entwicklungsgesellschaft Lacke und Farben, Magdeburg, Germany (Research and Development Organisation for Paints and Varnishes)	22/08/2013	130608	Product	Intensity of / Degree of				
						MIG ESP - Exterior	yellowing	0		no	
							Blistering	0		no	
							cracking	0		no	
							flaking	0		no	
							chalking	2		slight	
Quality Management System	ISO9001:2015		QRS(Intl)	22/06/2021	AQG10001	Development, Production and Distribution of products in construction chemistry of chemical substances, technology and other innovative technologies					

VOC Volatile Organic Compound
 CMR VOC Carcinogenic, Mutagenic, Reproduction-toxic VOC
 SVOC Semi Volatile Organic Compound
 VVOC Very Volatile Organic Compound