

**Reach out for  
the ideal™**

**LG HI-MACS®**  
Natural Acrylic Stone™

Technical Datasheet



# Sheet Specification

Sheet thickness in mm	Sheet width in mm	Sheet length in mm		
6	760	2490	3070*	
9	760		3070*	3680
	910*		3070*	3680*
12	760		3070*	3680
	910*		3070*	3680*

\* Special customized order only

## Technical Datasheet

Specification	Unit	Result		Test method	
		Solids	Granite		
Flexural modulus	MPa	8900	7730	DIN EN ISO 178	
Flexural strength	MPa	76.9	71.7	DIN EN ISO 178	
Flexural elongation	%	1	1.1	DIN EN ISO 178	
Tensile strength	MPa	32.7	31.7	DIN EN ISO 527	
Density	g/cm <sup>3</sup>	1.71	1.64	ISO 1183	
	kg/m <sup>3</sup>	1710	1640	ISO 1183	
Hardness ball indentation method	N/mm <sup>2</sup>	257	239	DIN EN ISO 2039-1	
Mohs-hardness		2 to 3	2 to 3	EN 101	
Pencil-hardness		>9H	>9H	ISO 15184	
Water absorption				DIN EN 438 part 12	
	weight	<0,1%	<0,1%		
	thickness	<0,1%	<0,1%		
Impact resistance					
	impactor	N	≥25	≥25	E DIN EN 438, 02/02 part 2/20
dropping ball test (high)	mm	≤1500	≤1500	E DIN EN 438, 02/02 part 2/21	
Slippery resistance		>0,32 - 0,9		GMG100 (replaces R9)	
Climate change resistance	°C	≤0,05	≤0,05	AMK	
Dry heat (pan bottom)	°C	≤100 (7C)		DIN 68 861, part 7, 04-'85	
Wet heat (pan bottom)	°C	≤100 (8A)		DIN 68 861, part 8, 04-'85	
Temperature change resistance	°C	no change		UNI 9429	
Cigarette burn resistance		6C	6B	DIN 68 861, part 6, 11-'82	
Scratch resistance		4D	4B	DIN 68 861, part 4, 11-'81	
Electrostatics				DIN IEC 1340-4-1, 04-'92	
	conductivity resistance	>1x10 <sup>12</sup> Ω	insulating		EN 61340-5-1
Thermal conductivity	W/mK	0.636	0.55	DIN EN 12664	
Thermal resistance	m <sup>2</sup> K/W	0.038	0.045	DIN EN 12664	
Thermal expansion coefficient	mm/mK	0.048	0.055	DIN EN 14581	
	m/m/°C	30.0 x 10 <sup>-6</sup>			
Water vapor transmission properties				DIN EN ISO 12572	
	resistance factor	μ	18607	16150	
Change of size by change of relative humidity				DIN EN 318, edition 5, 1998	
	length	%	-0.03		-0.02
	thickness	%	0.06		0.03
	mass	%	0.05		0.05
Resistance to boiling water				E DIN EN 438, 02/02 part 2/12	
	change of weight	%	<0,1		<0,1
	change of thickness	%	<0,1		<0,1
Light resistance (Xenon)	Skala 0-10	better 6	better 6	DIN 53 387, 04-'89	
Resistance of food contact		suitable for all colours		LMBG § 31	
Hygiene		suitable	suitable	LGA hygiene certificate	
Fire resistance Low flammability		B1		DIN 4102-1	
	(BAM) 12 mm	B1 for all colours*			
	(BAM) 9mm + backup	B1 for all colours*		DIN 4102-1	
	(Warrington) 12 mm	class1 S05		BS 476 class 1	

\* (at the moment not valid for Volcanics)



## Chemical Resistance According to DIN 68861 & DIN 68930 Tab.1

Test material	Time of influence	Assessment G02 defects	Assessment S06 defects
Acetic acid (vinegar)	16 h	no effect	no effect
Citric acid (lemon)	16 h	no effect	no effect
Natrium carbonate	16 h	no effect	no effect
Ammoniac water	16 h	no effect	no effect
Ethyl Alcohol	16 h	no effect	no effect
White wine, red wine, South wine	16 h	no effect	no effect
Beer	16 h	not tested	not tested
Cola-drinks	16 h	no effect	no effect
Instant coffee	16 h	no effect	no effect
Black tea	16 h	no effect	no effect
Blackcurrant juice	16 h	no effect	no effect
Cream	16 h	no effect	no effect
Water	16 h	no effect	no effect
Benzine	16 h	no effect	no effect
Acetone	16 h	3	3
Ethyl-Butyl Acetate	16 h	3	3
Butter	16 h	no effect	no effect
Olive oil	16 h	no effect	no effect
Mustard	16 h	no effect	no effect
Salt	16 h	no effect	no effect
Onion	16 h	no effect	no effect
Lipstick	16 h	no effect	no effect
Disinfectant	16 h	no effect	no effect
Black ballpoint	16 h	2	2 - 3
Stamping ink	16 h	1	1
Household cleaner	16 h	no effect	no effect
Cleaning agent	16 h	no effect	no effect
Use group according to DIN 68861		1B	1B
Assessment according to DIN 68930 Tab 1 Other work top spaces: use group: «1C»		Fulfill of requirements +	

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