TECHNICAL DATA SHEETS | ASTM

DEKTON[®] -DEKTON[®] XGLOSS

Families I - II – III - IV

All the data collected in this document are based on tests carried out in independent external laboratories.

Manufacturer's name and place of production: Company: Cosentino S.A.U. Address: A-334 road, km 59, postal code 04850 Cantoria (Almeria) - Spain

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DEKTON[®] TECHNICAL DATA SHEET According to ASTM Standards (American Society for Testing and Materials)

Family I: (Aldem, Ananke, Borea, Bromo, Domoos, Fossil, Galema, Kadum, Kelya, Keon, Keranium, Kira, Korus, Kovik, Kreta, Laos, Milar, Odin, Orix, Sirius, Sirocco, Soke, Strato, Valterra, Vegha, Ventus, Vera).

Family II: (Ariane, Aura, Aura15, Entzo, Kairos, Lunar, Nayla, Nilium, Opera, Portum, Zenith)

Family III: (Aged Timber, Bento, Blanc Concrete, Danae, Dove, Edora, Gada, Irok, Makai, Popular Dark, Popular Warm, Sarey, Sasea, Sterling) Family IV: (Radium, Trilium)

Standard test	Determination	Unit	Family I	Family II	Family III	Family IV			
Moisture expansion ASTM C370	Average moisture expansion	%	0.02	0.005	0.004	0.02			
Breaking strength ASTM C648	Average breaking strength	lbf	3963	4896	3932	1194			
Flexural properties ASTM C674	Average modulus of rupture	psi	8990	8836	9005	8023			
Water absorption, apparent porosity ASTM C373	Average water absorption	%	0.03 (Impervious)	0.05 (Impervious)	0.01 (Impervious)	0.0 (Impervious			
Static coefficient of friction (skid resitance) ASTM C1028	Static coefficient of friction dry	-	0.80	0.77	0.77	0.76			
	Static coefficient of friction wet	-	0.66	0.56	0.69	0.61			
Wet dynamic coefficient of friction (DCOF) ANSI A137.1 section 9.6	Average DCOF	-	≥ 0.42	≥ 0.42	≥ 0.42	≥ 0.42			
Relative resistance to wear (Taber abrasion) ASTM C501	Average Abrasive Wear Index	-	182.2	337	240	239			
Thermal shock resistance ASTM C484	Defects	-	No defects	No defects	No defects	No defects			
Bond strength ASTM C482	Average bond strength	psi	423	437	357	454			
	Common Household and cleaning chemicals Acetic acid, 3% (v/v)								
	Acetic acid, 3% (v/v)	-	Not affected	Not affected	Not affected	Not affected			
	Acetic acid, 10% (v/v)	-	Not affected	Not affected	Not affected	Not affected			
	Ammonium chloride, 100 g/L	-	Not affected	Not affected	Not affected	Not affected			
	Citric acid solution, 30 g/L	-	Not affected	Not affected	Not affected	Not affected			
	Citric acid solution, 100 g/L	-	Not affected	Not affected	Not affected	Not affected			
	Lactic acid, 5% (v/v)	-	Not affected	Not affected	Not affected	Not affected			
	Phosphoric acid, 3% (v/v)	-	Not affected	Not affected	Not affected	Not affected			
Resistance to chemical substances ASTM C650	Phosphoric acid, 10% (v/v)	-	Not affected	Not affected	Not affected	Not affected			
	Sulfamic acid, 30 g/L	-	Not affected	Not affected	Not affected	Not affected			
	Sulfamic acid, 100 g/L	-	Not affected	Not affected	Not affected	Not affected			
	Swimming pool chemicals								
	Sodium hypoclorite solution, 20 mg/L	-	Not affected	Not affected	Not affected	Not affected			
	Acids and bases								
	Hydrochloric acid solution, 3% (v/v)	-	Not affected	Not affected	Not affected	Not affected			
	Hydrochloric acid solution, 18% (v/v)	-	Not affected	Not affected	Not affected	Not affected			
	Potassium hydroxide, 30 g/L	-	Not affected	Not affected	Not affected	Not affected			
	Potassium hydroxide, 100 g/L	-	Not affected	Not affected	Not affected	Not affected			
Absorption and bulk gravity	Average weight percent absorption	%	0.02	0.04	0.02	0.04			
ASTM C97	Average density	lb/ft ³	156	160.63	157.6	152.7			
Modulus of rupture	Average modulus of rupture dry conditions	psi	8128	9042	7369	-			
ASTM C99	Average modulus of rupture wet conditions	psi	7490	8446	7480	-			
Flexural strength	Average flexural strength dry conditions	psi	6840	3118	5858	6068			
ASTM C880	Average flexural strength wet conditions	psi	6205	4187	5119	6249			
Compressive strength	Average compressive strength dry conditions	psi	34409	> 55000	44882	53800			
ASTM C170	Average compressive strength wet conditions	psi	17823	> 55000	40165	58600			
Abrassion resistance ASTM C1353	Average index of abrassion	-	349	349.48	265.8	263			

Dekton Grip+ colors: Keon, Kreta, Orix, Soke, Vera, Aura 15 (*), Danae (*), Kira (*), Laos (*), Lunar (*), Nayla (*), Nilium (*), Makai (*), Sirocco (*), Strato (*), Trilium (*)

Standard test	Determination	Value	
ANSI A137.1	DCOF	≥ 0.69	

(*) Confirm application for these colors.

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According to ASTM Standards (American Society for Testing and Materials)

Family I: (Blaze, Korso, Lumina, Manhattan, Sogne, Spectra, Splendor)
Family II: (Bergen, Halo, Fiord, Tundra, Glacier, Natura, Natura 18, Olimpo, Vienna)
Family III: (Arga, Qatar, Taga)

Standard test	Determination	Unit	Family I	Family II	Family III			
Moisture expansion ASTM C370	Average moisture expansion	%	0.02	0.005	0.004			
Breaking strength ASTM C648	Average breaking strength	lbf	3963	4896	3932			
Flexural properties ASTM C674	Average modulus of rupture	psi	8990	8836	9005			
Water absorption, apparent porosity ASTM C373	Average water absorption	%	0.03 (Impervious)	0.05 (Impervious)	0.01 (Impervious)			
Static coefficient of friction (skid resitance) ASTM C1028	Static coefficient of friction dry	-	0.96	0.96	0.96			
	Static coefficient of friction wet	-	0.56	0.56	0.56			
Wet dynamic coefficient of friction (DCOF) ANSI A 137.1 section 9.6	Average DCOF	-	≤ 0.21	≤ 0.21	≤ 0.21			
Relative resistance to wear (Taber abrasion) ASTM C501	Average Abrasive Wear Index	-	182.2	337	240			
Thermal shock resistance ASTM C484	Defects	-	No defects	No defects	No defects			
Bond strength ASTM C482	Average bond strength	psi	423	437	357			
	Common Household and cleaning chemicals Acetic acid, 3% (v/v)							
	Acetic acid, 3% (v/v)	-	Not affected	Not affected	Not affected			
	Acetic acid, 10% (v/v)	-	Not affected	Not affected	Not affected			
	Ammonium chloride, 100 g/L	-	Not affected	Not affected	Not affected			
	Citric acid solution, 30 g/L	-	Not affected	Not affected	Not affected			
	Citric acid solution, 100 g/L	-	Not affected	Not affected	Not affected			
	Lactic acid, 5% (v/v)	-	Not affected	Not affected	Not affected			
	Phosphoric acid, 3% (v/v)	-	Not affected	Not affected	Not affected			
Resistance to chemical substances	Phosphoric acid, 10% (v/v)	-	Not affected	Not affected	Not affected			
ASTM C650	Sulfamic acid, 30 g/L	-	Not affected	Not affected	Not affected			
	Sulfamic acid, 100 g/L		Not affected	Not affected	Not affected			
	Swimming pool chemicals	-						
	Sodium hypoclorite solution, 20 mg/L	_	Not affected	Not affected	Not affected			
	Acids and bases		Not anected	Not anected	Not anected			
Absorption and bulk gravity		l -	Not offerted	Not affected	Not affected			
	Hydrochloric acid solution, 3% (v/v)		Not affected					
	Hydrochloric acid solution, 18% (v/v)		Not affected	Not affected	Not affected			
	Potassium hydroxide, 30 g/L		Not affected	Not affected	Not affected			
	Potassium hydroxide, 100 g/L	-	Not affected	Not affected	Not affected			
	Average weight percent absorption	%	0.02	0.04	0.02			
ASTM C97	Average density	lb/ft ³	156	160.63	157.6			
Modulus of rupture	Average modulus of rupture dry conditions	psi	8128	9042	7369			
ASTM C99	Average modulus of rupture wet conditions	psi	7490	8446	7480			
Flexural strength ASTM C880	Average flexural strength dry conditions	psi	6840	3118	5858			
	Average flexural strength wet conditions	psi	6205	4187	5119			
Compressive strength	Average compressive strength dry conditions	psi	34409	> 55000	44882			
ASTM CI70	Average compressive strength wet conditions	psi	17823	> 55000	40165			
Abrassion resistance ASTM CI353	Average index of abrassion	-	349	349.48	265.8			