

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

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

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

Family II: (Ariane, Aura, Aura 15, Bedrock, Entzo, Kairos, Liquid Shell, Liquid Sky, Lunar, Nayla, Nilium, Opera, Portum, Rem, Sand Drift, Uyuni, Vapour, Zenith)

Family III: (Aeris, 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 resistance) 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
Resistance to chemical substances ASTM C650	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
	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 hypochlorite 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 ASTM C97	Average weight percent absorption	%	0.02	0.04	0.02	0.04
	Average density	lb/ft ³	156	160.63	157.6	152.7
Modulus of rupture ASTM C99	Average modulus of rupture dry conditions	psi	8128	9042	7369	-
	Average modulus of rupture wet conditions	psi	7490	8446	7480	-
Flexural strength ASTM C880	Average flexural strength dry conditions	psi	6840	3118	5858	6068
	Average flexural strength wet conditions	psi	6205	4187	5119	6249
Compressive strength ASTM C170	Average compressive strength dry conditions	psi	34409	> 55000	44882	53800
	Average compressive strength wet conditions	psi	17823	> 55000	40165	58600
Abrasion resistance ASTM C1353	Average index of abrasion	-	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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Family I: (Blaze, Korso, Lumina, Manhattan, Sogne, Spectra, Splendor)

Family II: (Bergen, Fiord, Glacier, Halo, Helena, Natura, Natura 18, Tundra, Tundra 19, Olimpo, Vienna)

Family III: (Arga, Khalo, 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 resistance) 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 A137.1 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
Resistance to chemical substances ASTM C650	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
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	Phosphoric acid, 3% (v/v)	-	Not affected	Not affected	Not affected
	Phosphoric acid, 10% (v/v)	-	Not affected	Not affected	Not affected
	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 hypochlorite solution, 20 mg/L	-	Not affected	Not affected	Not affected
	Acids and bases				
	Hydrochloric acid solution, 3% (v/v)	-	Not affected	Not affected	Not affected
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Potassium hydroxide, 30 g/L	-	Not affected	Not affected	Not affected	
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	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 ASTM C170	Average compressive strength dry conditions	psi	34409	> 55000	44882
	Average compressive strength wet conditions	psi	17823	> 55000	40165
Abrasion resistance ASTM C1353	Average index of abrasion	-	349	349.48	265.8