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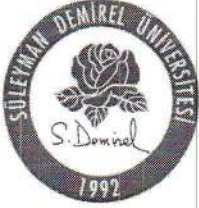
NATURAL STONE TECHNOLOGY LABORATORY  
32260 ISPARTA

**TECHNICAL REPORT**

The physical, mechanical and petrographic properties in accordance with TS EN standards of the marble samples called as "Adonis" belongs to Adalya Marble Industry Trade Inc.

June – 2015  
ISPARTA / TURKEY





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## PREFACE

Various laboratory tests were applied in accordance with TS EN standards to determine the physical and mechanical properties and petrographic descriptions of marble samples called as “Adonis” belongs to **Adalya Marble Industry Trade Inc.**. The results of tests are presented in Tables. 02 / 06 / 2015





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Company Name : **Adalya Marble Industry Trade Inc.**

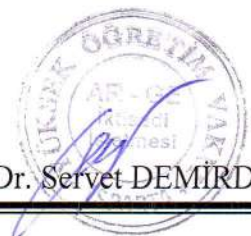
Commercial Designation of Sample : **Adonis**

Date: **02 / 06 / 2015**

PHYSICAL AND MECHANICAL PROPERTIES						
	Metric System		SI System		Standard	
Hardness	Mohs	3.5 - 4	Mohs	3.5 - 4	TS 6809	
Bulk Specific Gravity						
Dry	g/cm <sup>3</sup>	2.703 ± 0.001	kg/m <sup>3</sup>	2703 ± 1	TS EN 1936	
Saturated	g/cm <sup>3</sup>	2.705 ± 0.001	kg/m <sup>3</sup>	2705 ± 1		
Density	g/cm <sup>3</sup>	2.726 ± 0.013	kg/m <sup>3</sup>	2726 ± 13	TS EN 1936	
Water Abs. at Atm. Press.						
by Volume	%	0.244 ± 0.03	%	0.244 ± 0.03	TS EN 13755	
by Weight	%	0.090 ± 0.01	%	0.090 ± 0.01		
Effective Porosity	%	0.244	%	0.244	TS EN 1936	
Real Porosity	%	0.84	%	0.84	TS EN 1936	
Fullness Ratio	%	99.16	%	99.16	TS 699	
Water absorption coefficient by capillarity	g/m <sup>2</sup> .s <sup>0.5</sup>	0.16 ± 0.03	g/m <sup>2</sup> .s <sup>0.5</sup>	0.16 ± 0.03	TS EN 1925	
Compressive Strength	kg/cm <sup>2</sup>	1536 ± 173	MPa	150.6 ± 17.0	TS EN 1926	
Compressive Strength after Freeze-Thaw (12 cyc.)	kg/cm <sup>2</sup>	1442 ± 97	MPa	141.4 ± 9.5	TS EN 12371	
Changing of Compressive Strength after Freeze-Thaw (-)	%	6.11	%	6.11	TS EN 12371	
Decreasing of Weight after Freeze-Thaw	%	0.007	%	0.007	TS EN 12371	
Flexural Strength Under Concentrated Load	kg/cm <sup>2</sup>	154 ± 12	MPa	15.1 ± 1.2	TS EN 12372	
Changing of Flexural Strength after Freeze-Thaw (-) (12 cyc.)	kg/cm <sup>2</sup>	143 ± 19	MPa	14.1 ± 1.9	TS EN 12371	
Changing of Flexural Strength after Freeze-Thaw (-)	%	7.11	%	7.11	TS EN 12371	
Resist. to ageing by thermal shock						
by weight (-)	%	0.015	%	0.015	TS EN 14066	
by modulus of elasticity (-)	%	8.00	%	8.00		
Water vapour resistance factor (dry)	μ-value	279	μ-value	279	TS EN 12524	
Thermal conductivity (λ)	W/m.K	2.54	W/m.K	2.54	TS EN 12524 (Thermal resist.)	
Abrasion Strength (Method-B/Bohme)	cm <sup>3</sup> /50cm <sup>2</sup>	8.3 ± 0.2	cm <sup>3</sup> /50 cm <sup>2</sup>	8.3 ± 0.2	TS EN 14157	
Slip Resistance						
Dry	SRV	39.1 ± 0.4	SRV	39.1 ± 0.4	TS EN 14231	
Wet		18.5 ± 0.5		18.5 ± 0.5		
P-Wave Velocity	m/s	6355 ± 78	m/s	6355 ± 78	TS EN 14579	



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