

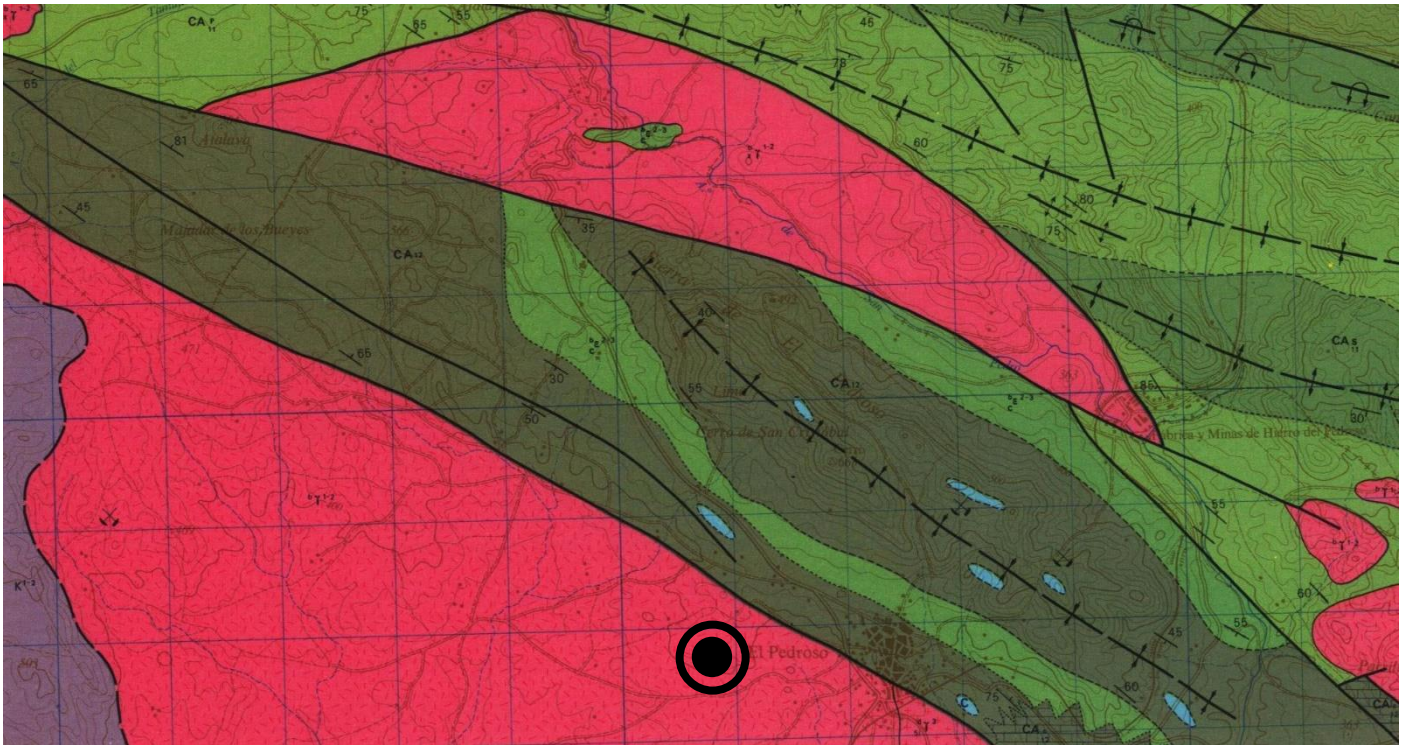
Tezal



Short description: Medium to coarse grain biotitic tonalite and hypidiomorphic texture.

Commodity (vocabulary)	Lithology (vocabulary)	Typical colour (code list)	Place of origin			
			Country	County / District / Province	Municipality / Community	Place/town / Village
biotite tonalite	granite	grey	Spain	Sevilla	El Pedroso	El Pedroso

Geological setting



Geology: Su textura es granuda, inequigranular, holocristalina de grano medio a grueso. El cuarzo tiene a veces crecimientos gráficos. Granite from the El Pedroso Stock, which has a very slight orientation on a microscopic scale; it constitutes a unique mass located in Lower Cambrian rocks (Campoallá series), made up of pelitic materials and calcareous rocks. To the east there is a differentiation towards pink granites classified in the laboratory as micropegmatite. The rocks of this stock are mostly of amphibole dioritic and quartzodioritic composition. Its texture is grainy, inequigranular, holocrystalline with a medium to coarse grain. Quartz sometimes has graphic growths.

Production: The old quarry is covered, after its abandonment.

Geological age: Carboniferous.

Geological unit: El Pedroso stock.

Petrography

Description: Primary Minerals: quartz, plagioclase, biotite; Secondary Minerals: sericite, chlorite, epidote; Accessory Minerals: zircon, apatite, rutile, opaque. Amphiboles are quite altered to micas and chlorite.

Source of information: <http://www.igme.es/>.

Physical properties

Apparent density (EN 1936) kg/m ³	Open porosity (EN 1936) % vol	Water absorption at atmospheric pressure (EN 13755) % wt	Uniaxial Compressive strength (EN 1926) MPa	Flexural strength under concentrated load (EN 12372) MPa
2790		0.11	101.6	11.96

Real density (EN 1936) kg/m ³	Total porosity (EN 1936) % vol	Water absorption coefficient by capillary (EN 1925) (g/m ² x s ^{0,5})	Flexural strength under constant moment (EN 13161) MPa

Frost resistance (EN 12371)				
Technological Test (Test A)				Identification Test (Test B): Number of cycles completed prior to stone failure
Flexural strength (EN 12372) after freeze-thaw cycling, MPa	Number of cycles	Uniaxial compressive strength (EN 1926) after freeze-thaw cycling, MPa	Number of cycles	

Resistance to ageing by thermal shock (EN 14066)			
Change in dynamic modulus of elasticity (increase: +; decrease: -) %	Change in open porosity (increase: +; decrease: -) %	Change in ultrasound pulse velocity (increase: +; decrease: -) %	Change in flexural strength under conc. load (increase: +; decrease: -) %

Abrasion resistance (EN 14157)			Resistance to salt crystallisation (EN 12370)	Breaking load at dowel hole (EN 13364)	
Method A - Wide Wheel Abrasion Test, mm	Method B - Böhme Abrasion Test, cm ³ / 50cm ²	Method C - Amsler Abrasion Test, mm	Change in mass (increase: +; decrease: -), %	Breaking load, N	Thickness of the test specimens, mm

Slip resistance by means of the pendulum tester (EN 14231 / CEN/TS 16165)			Rupture energy (EN 14158), Joule	Thermal Conductivity (EN 1745), W/m·K
Tested surface finish	Slip Resistance Value — SRV			
	Dry test condition	Wet test condition		

Source of information: La Piedra Natural de España. Directorio 1988, 2007. Roc Maquina. / Piedra Natural. Granitos de España. FDP.

Sources of more information

Type of information	Name of provider	URL
This data sheet	Instituto Geológico y Minero de España (IGME)	http://www.igme.es/
Non-commercial directory		
Commercial directory		
Scientific publication		
Other publication		

Compiled by:	Instituto Geológico y Minero de España (IGME) http://www.igme.es/	 Instituto Geológico y Minero de España
---------------------	--	--