

Azul Claro

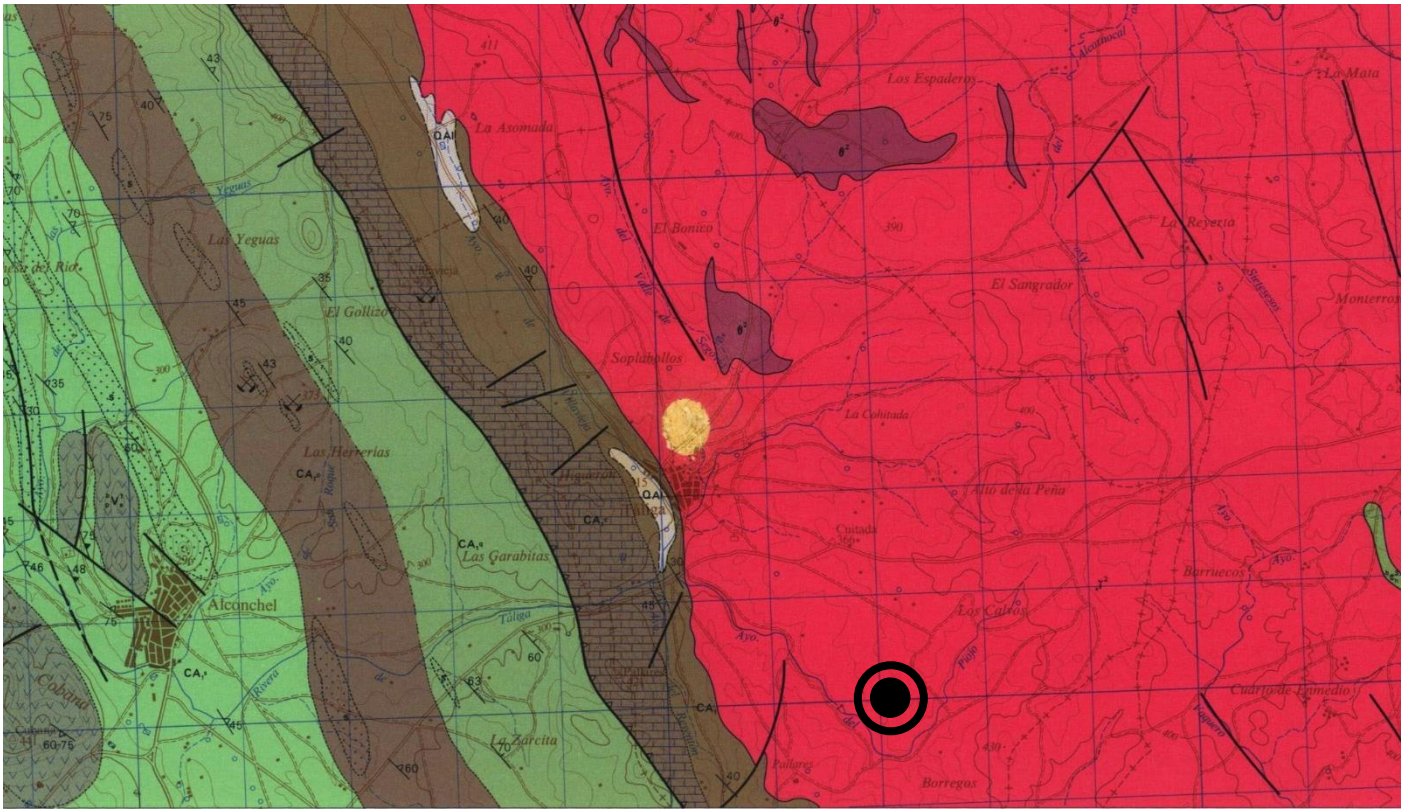


5 cm

Short description: Cataclastic porphyritic granite, fine to medium grain with sulfides. Blueish gray color, with K-feldspar phenocrysts of up to 7 cm and blueish quartz. Its structure is determined by its foliation, with orientation of the biotite and the feldspar crystals. Enclaves are relatively frequent, with cm scale sizes, biotitic, and others metamorphosed, oriented by the foliation.

Commodity (vocabulary)	Lithology (vocabulary)	Typical colour (code list)	Place of origin			
			Country	County / District / Province	Municipality / Community	Place/town / Village
pophyric cataclastic	granite	grey/blue	Spain	Badajoz	Barcarrota Táliga	Barcarrota Táliga

Geological setting



Geology: The Tálga-Higuera de Vargas Massif is the one with the largest affluent surface of all those located in the nucleus of the Olivenza-Monesterio anticlinorium. Compositionally is very homogeneous, it is characterized by biotitic porphyritic granites, bluish gray in color, coarse grained with phenocrysts of K-feldspar of up to 7 cm long and bluish quartz. Its structure is determined by the foliation, with orientation of the biotite and the large feldspar crystals. The relatively frequent enclaves are centimeter-sized, biotitic and others metamorphic reoriented according to the foliation. The most representative example in exploitation of these ornamental granites is the Azul Claro variety. Its exploitation fronts are of medium length and with some fractures and alterations, resulting in that the extraction of usually small blocks. Cataclastic biotitic granite with holocrystalline, inequigranular and hypidiomorphic texture. The main minerals are: quartz, microcline, calcium plagioclase and / or biotite-muscovite. The grain size is medium to coarse. In many preparations, K-feldspar is observed in large sheets and tectonized. The biotite is also flexed, presenting opaque inclusions. The quartz of the mylonitic bands has recrystallized in mosaic with undulose extinction and strong elongation.

Production: Produced in Tálga, Extremadura.

Geological age: Mid- Cambrian (505 million years).

Geological unit: Tálga massif.

Petrography

Description: Cataclastic porphyritic granite, fine to medium grain with sulfides, with feldspars up to 2-3 cm. Main minerals: quartz, K-feldspar, plagioclase, hastingsite, biotite; Accessory minerals: zircon, sphene, apatite, muscovite, sericite, opaques.

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
2680		0,15	84,23	10,98

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
	10,98		

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: Granitos de España. 1990. ITGE.

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		

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