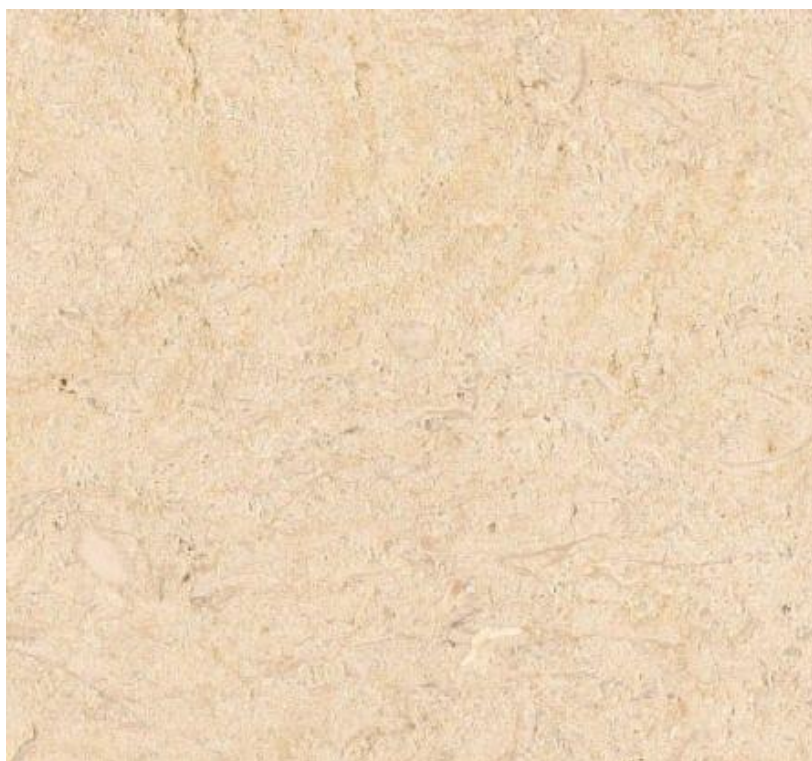


Crema Gilena

Moralejo Beige

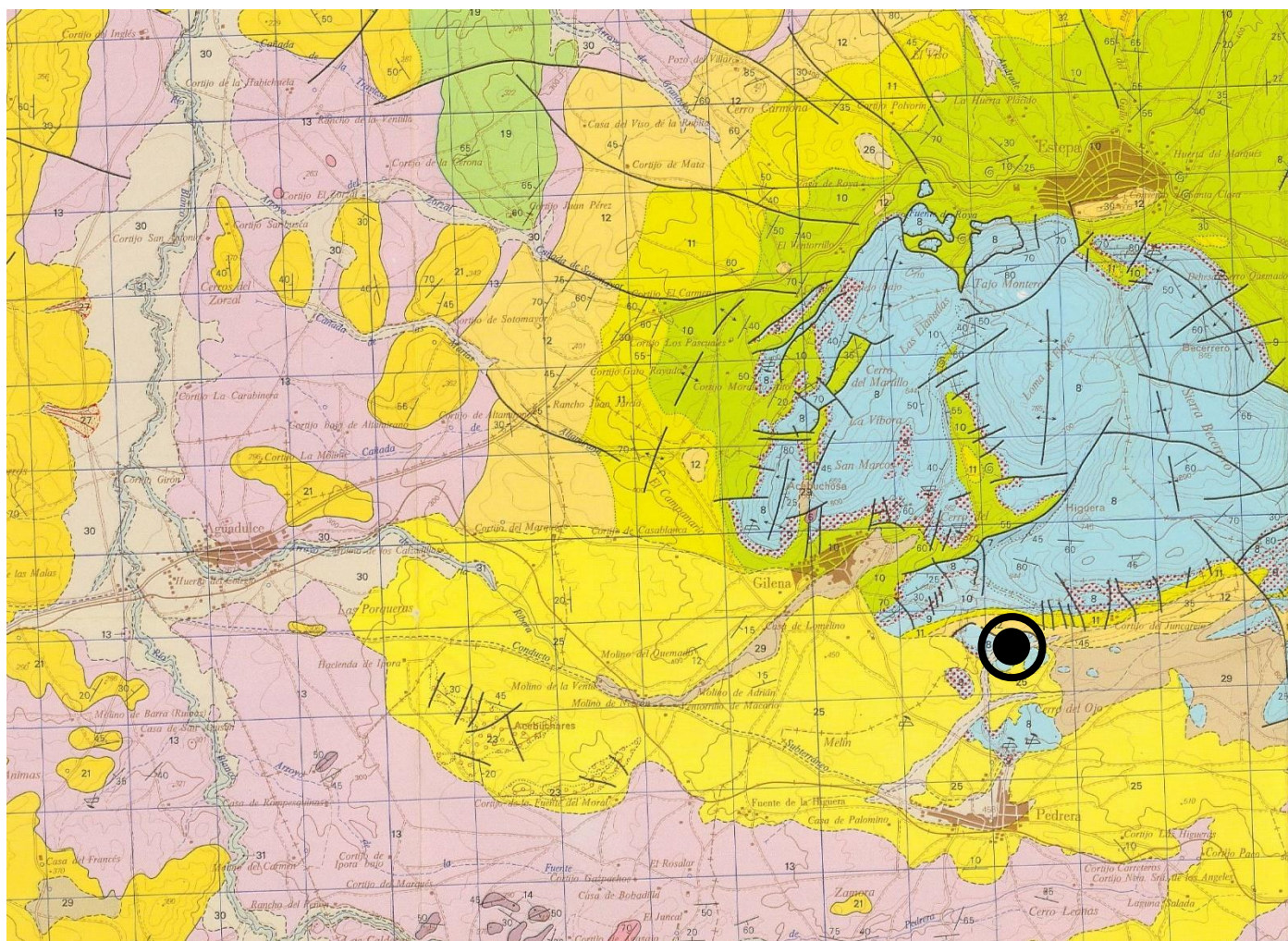


2 cm

Short description: White-cream colored rock, with abundant centimetric sized fossils, with some porosity, and very effervescent in cold when tested with chlorhydric acid.

Commodity (vocabulary)	Lithology (vocabulary)	Typical colour (code list)	Place of origin			
			Country	County / District / Province	Municipality / Community	Place/town / Village
limestone	limestone	white	Spain	Sevilla	Estepa	Estepa

Geological setting



Geology: Massive white limestones with ooliths and oncoliths (up to 2 cm), dating 171.6-167.7 million years.

Production: Quarry located in the municipality of Estepa, near Gilena. In the area there are other quarries that produce the same limestone but with different names.

Geological age: Bajociense (171,6-167,7 million years).

Geological unit: Jabalcruz-Camarena formation.

Petrography

Description: Texture: Numerous centimeter-sized fossil fragments in a recrystallized micritic calcite matrix. Observations: Carbonate sedimentary rock of marine origin, formed by a considerable amount of fossiliferous organic remains in a micritic calcite matrix with recrystallization. The organic fossil fragments are composed of a microcrystalline calcite of micritic type (grain size less than 5 microns), the calcite of the matrix is also majorly micritic, with recrystallization where the calcite reaches sizes between 0.0150 and 0.0625 mm. Main minerals: Calcite. Accessory minerals: 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
2420		3,88	54,4	8,81

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: <https://www.stonecontact.com/caliza-gilena/s923>

Chemical properties

Main elements

SiO ₂ (%)	Al ₂ O ₃ (%)	Fe ₂ O ₃ (%)	TiO ₂ (%)	MgO (%)	CaO (%)	Na ₂ O (%)	K ₂ O (%)	MnO (%)	P ₂ O ₅ (%)	SO ₃ (%)	LOI (%)
0,31	<0,05	<0,01		0,181	55,458	0,089	<0,01				43,805

Trace elements

V (ppm)	Cr (ppm)	Mn (ppm)	Co (ppm)	Ni (ppm)	Cu (ppm)	Zn (ppm)	As (ppm)
Sr (ppm)	Cd (ppm)	Ba (ppm)	Pb (ppm)	Be (ppm)	Rb (ppm)	Bi (ppm)	U (ppm)
Sc (ppm)	Y (ppm)	Th (ppm)	Sb (ppm)	Ta (ppm)	Nb (ppm)	Zr (ppm)	Sn (ppm)
Ag (ppm)	B (ppm)	Mo (ppm)	W (ppm)	Ga (ppm)	Ge (ppm)	Se (ppm)	Cs (ppm)
Tl (ppm)							

REE

La (ppm)	Ce (ppm)	Pr (ppm)	Nd (ppm)	Sm (ppm)	Eu (ppm)	Gd (ppm)	Tb (ppm)
Dy (ppm)	Ho (ppm)	Er (ppm)	Tm (ppm)	Yb (ppm)	Lu (ppm)		

Methods applied and source of information:

https://fcc.es/documentos/05_documentos_por_temas/Desalacion%20Post-tratamiento/Geo_Calcita_Sevilla_FCCA_Mem_y_Anejos.pdf

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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