

Agate Mortar and Pestle

Agate is a microcrystalline variety of silica, chiefly chalcedony, characterised by its fineness of grain and brightness of color. Although agates may be found in various kinds of rock, they are classically associated with volcanic rocks and can be common in certain metamorphic rocks.

Most agates occur as nodules in volcanic rocks or ancient lavas where they represent cavities originally produced by the disengagement of volatiles in the molten mass which were then filled, wholly or partially, by siliceous matter deposited in regular layers upon the walls. Agate has also been known to fill veins or cracks in volcanic or altered rock underlain by granitic intrusive masses. Such agates, when cut transversely, exhibit a succession of parallel lines, often of extreme tenuity, giving a banded appearance to the section. Such stones are known as banded agate, ribband agate and striped agate.

Category	Agate Properties
Formula	SiO ₂ silicon dioxide
Color	White to grey
Crystal habit	Cryptocrystalline silica
Crystal system	Rhombohedral Microcrystalline
Cleavage	None
Fracture	Conchoidal with very sharp edges
Mohs scale hardness	6.5-7
Luster	Waxy
Diaphaneity	Translucent
Specific gravity	2.58-2.64