



PERIDOT AND OTHER YELLOWISH-GREEN REFLECTIONS SIAMITE® GLASS-CERAMIC

Peridot is a gem variety of the mineral olivine and serves as the birthstone for August as well as the gemstone for the 16th wedding anniversary. Along with peridot, we have included imitations of demantoid and tsavorite (natural green garnets) in the SIAMITE® yellowish-green gemstones reflections group.



MATERIALS OVERVIEW

The color and other physical properties of peridot are determined by the ratio of iron and magnesium in its composition, as olivine is a continuous solid solution between fayalite (Fe_2SiO_4) and forsterite (Mg_2SiO_4). Peridots with a high proportion of fayalite (iron) exhibit brownish green, olive-green, and yellow-green colors. As the proportion of forsterite (magnesium) increases, the color shifts to yellowish-green and green.

Demantoid (a type of Andradite garnet) displays a color range from very strong yellowish green to vibrant green. Natural Tsavorites (Grossular garnet) typically exhibit light to deep forest green colors, with slightly yellowish varieties also present, though they are less valued.

In the attached table of physical properties of the described gems and their imitations, it is evident that SIAMITE® is much closer to natural stones in terms of hardness and specific gravity than cubic zirconia, but it has a noticeably lower refractive index. Cubic zirconia, in comparison, has significantly higher hardness, refractive index, and density parameters relative to both natural stones and SIAMITE®.

	Peridot	Demantoid	Tsavorite	SIAMITE®	CZ
Hardness	6.5-7	6.5-7	7-7.5	7.5	8-8.5
Reflective Index	1.64-1.7	1.8-1.89	1.74	1.63	2.1-2.2
Specific Gravity g/cm³	3.2-4.3	3.84	3.6-3.68	3.2-3.3	5.5-6.1

SIAMITE®
CREATED BY FORMICA



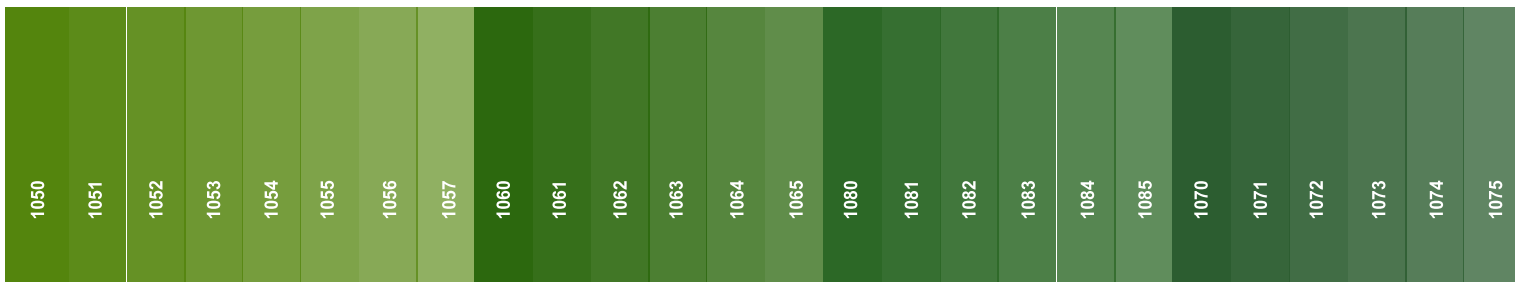
HIGH
REFLECTION

ADVANCED
APPLICATIONS

PERIDOT AND GREEN GARNET REFLECTIONS

COLOR PALETTE

Below, in Table and in Figures you can see the entire range of available colors and shades of SIAMITE® imitations of peridots and green garnets. We tried and, in my opinion, we succeeded to reproduce the entire color range of peridots, demantoids and tsavorite existing in nature – from the most saturated to very light and from yellowish to vivid green. Some of them are bestsellers because they are visually indistinguishable from the most valuable natural analogues – green peridots from Afghanistan and Pakistan (#1050, 1053, 1056), demantoids of the Ural Mountains (#1061-1063) and tsavorites from Kenya (#1080-1083, 1070-1073).



1050-1057 PERIDOT

	1050	D	Yellowish Green
	1051		
	1052	M	Yellowish Green
	1053	M	Strongly Yellowish Green
	1054	M/L	Strongly Yellowish Green
	1055	M	Yellow Green
	1056	D/M	Slightly Yellowish Green
	1057	L	Slightly Yellowish Green

1060-1065 DEMANTOID

	1060	VD	Very Slightly Yellowish Green
	1061	VD/D	Slightly Yellowish Green
	1062	D	Slightly Yellowish Green
	1063	M	Slightly Yellowish Green
	1064	L	Yellowish Green
	1065	VL	Yellowish Green

1080-1085 TSAVORITE

	1080	VD	Very Slightly Yellowish Green
	1081	VD/D	Very Slightly Yellowish Green
	1082	D	Very Slightly Yellowish Green
	1083	M	Very Slightly Yellowish Green
	1084	L	Very Slightly Yellowish Green
	1085	VL	Very Slightly Yellowish Green

1070-1075 TSAVORITE GREEN

	1080	D	Green
	1081	D/M	Green
	1082	D/M	Green
	1083	M	Green
	1084	L	Green
	1085	VL	Green



PERIDOT AND GREEN GARNET REFLECTIONS

MATERIAL SAMPLE

All SIAMITE®, regardless of color, shade, or saturation, is successfully used for casting with stones—it does not change color or crack due to thermal shock. The material is offered for sale both as rough and in faceted form (from 0.8 mm and above). In addition to standard shapes and sizes, we accept orders for custom designs, including fantasy stones, intaglios, cameos, and other 2D and 3D shapes.



PERIDOT

DEMANTOID



TSAVORITE



It should be noted that although natural peridots and garnets have a higher refractive index than all SIAMITE®, the differences in the brilliance of faceted stones are minimal and not particularly noticeable. However, in the case of cubic zirconia in peridot or garnet colors, the differences in brilliance are much more pronounced.

SIAMITE® is the best imitation of many natural-colored gemstones, including peridot, demantoid, and tsavorite. Therefore, there is no need to harm the environment by mining when you can use material, produced sustainably, affordably, and in a wide range of colors, sizes, and shapes.

STANDARD AND CUSTOMIZATION SAMPLES AVAILABLE ON REQUEST.
FOR MORE INFORMATION, PLEASE VISIT OUR WEBSITE OR CONTACT OUR SALES AND TECHNICAL TEAM.