







## Alphabetical Gemstone List










Gemstones that begin with the letter "A"







Gemstone	Crystal System	Density	Hardness	Refractive index	Treatments
 <a href="#"><u>Achroite</u></a>	trigonal	3.06	7.0-7.5	1.624-1.644	none known
 <a href="#"><u>Actinolite</u></a>	monoclinic	3.00	5-6	1.602-1.655	none known
 <a href="#"><u>Adamite</u></a>	orthorhombic	4.32-4.68	3.5	1.710-1.768	none known
 <a href="#"><u>Agate</u></a>	microcrystalline	2.66	6.5-7.0	1.544-1.553	dying
 <a href="#"><u>Afghanite</u></a>	hexagonal	2.55-2.65	5.5-6.0	1.523-1.529	one known
 <a href="#"><u>Ajoite</u></a>	triclinic	2.96	3.5	1.550-1.641	none known
 <a href="#"><u>Alexandrite</u></a>	orthorhombic	3.72	8.5	1.746-1.755	none known
 <a href="#"><u>Allanite</u></a>	monoclinic	3.40-4.20	6-7	1.640-1.828	none known
 <a href="#"><u>Albite</u></a>	triclinic	2.57-2.77	6.0-7.0	1.527-1.590	none known
 <a href="#"><u>Amazonite</u></a>	triclinic	2.56	7.0-7.5	1.522-1.530	none known
 <a href="#"><u>Amber</u></a>	amorphous	1.08	2.0-2.5	1.54	heating, oiling, reconstitution
 <a href="#"><u>Amblygonite</u></a>	triclinic	2.9-3.11	5.5-6.0	1.578-1.636	none known
 <a href="#"><u>Amethyst</u></a>	hexagonal	2.66	7	1.544-1.553	heating alters to citrine
 <a href="#"><u>Ametrine</u></a>	hexagonal	2.66	7	1.544-1.553	none known
 <a href="#"><u>Ammolite</u></a>	Aggregate	2.60-2.85	4.5-5.5	1.520-1.680	Opticon, Coating
 <a href="#"><u>Anatase</u></a>	tetragonal	3.82-3.97	5.5-6.0	2.488-2.564	none known
 <a href="#"><u>Andalusite</u></a>	orthorhombic	3.2	7.5	1.63-1.64	none known
 <a href="#"><u>Andesine</u></a>	triclinic	2.66	6.0-6.5	1.542-1.562	diffused
 <a href="#"><u>Apatite</u></a>	hexagonal	3.2	5	1.63-1.64	heat
 <a href="#"><u>Apophyllite</u></a>	tetragonal	2.40	4.5-5.0	1.535-1.537	none known
 <a href="#"><u>Aquamarine</u></a>	hexagonal	2.72	7.5-8.0	1.577-1.583	heat
 <a href="#"><u>Axinite</u></a>	Triclinic	3.28	6.5-7.0	1.674-1.706	none known
 <a href="#"><u>Azurite</u></a>	monoclinic	3.7-3.8	3.5-4.0	1.730-1.838	none known

### Gemstones that begin with the letter "B"







Gemstone	Crystal System	Density	Hardness	Refractive index	Treatments
 <b>Bastnasite</b>	hexagonal	4.95-5.0	4.0-5.0	1.717-1.818	none
 <b>Benitoite</b>	hexagonal	3.64	6.0-6.5	1.757-1.804	none
 <b>Beryl</b>	hexagonal	2.72	7.5-8.9	1.577-1.583	heat, radiation, fracture filling, oiling
 <b>Bloodstone</b>	microcrystalline	2.60	6.5-7.0	1.535-1.539	none
 <b>Bixbite</b>	hexagonal	2.66	7.5-8.0	1.567-1.572	none
 <b>Brazillianite</b>	monoclinic	2.97	5.5	1.602-1.621	none

### Gemstones that begin with the letter "C"







Gemstone	Crystal System	Density	Hardness	Refractive index	Treatments
 <b>Calcareous Concretions</b>	aggregate	2.85	2.5-4.0	1.530-1.685	none known
 <b>Calcite</b>	trigonal	2.70	3.0	1.486-1.658	dying, filling, irradiation
 <b>Cassiterite</b>	tetragonal	6.95	6.0-7.0	1.997-2.093	none known
 <b>Carnelian</b>	microcrystalline	2.65	7.0	1.535-1.539	dying, filling
 <b>Chalcedony</b>	microcrystalline	2.65	7.0	1.535-1.539	dying
 <b>Charoite</b>	aggregate	2.68	5.0-6.0	1.550-1.559	none known
 <b>Chlorastrolite</b>	aggreagate	3.20	5.0-6.0	1.650-1.660	none known
 <b>Chrysoberyl</b>	orthorhombic	3.72	8.5	1.746-1.755	none
 <b>Chrysocolla</b>	microcrystalline	2.00-2.24	2-4	1.54	none

 <b><u>Chrysoprase</u></b>	microcrystalline	2.65	7	1.564-1.660	dying
 <b><u>Citrine</u></b>	hexagonal	2.66	7.0	1.544-1.553	heat
 <b><u>Copal</u></b>	organic	1.08	2.0	1.540	heat, heating in oil, dying
 <b><u>Coral</u></b>	organic	2.65	3.5-4.0	1.486-1.658	dying
 <b><u>Corundum</u></b>	trigonal	4.00	9.0	1.762-1.770	heat, fracture filling
 <b><u>Cuprite</u></b>	cubic	6.14	3.5-4.0	.2.849	none known



Gemstones that begin with the letter "D"

Gemstone	Crystal System	Density	Hardness	Refractive index	Treatments
 <b><u>Danburite</u></b>	orthorhombic	3.00	7.0	1.630-1.636	none known
 <b><u>Datolite</u></b>	monoclinic	2.95	5.0-5.5	1.626-1.670	none known
 <b><u>Demantoid</u></b>	cubic	3.84	6.5-7.0	1.875	none known
 <b><u>Diamond</u></b>	cubic	3.52	10	2.417	radiation, drilling, fracture filling
 <b><u>Diopside</u></b>	monoclinic	3.29	5-6	1.675-1.701	none known
 <b><u>Diopside</u></b>	trigonal	3.30	5	1.675-1.708	none known




Gemstones that begin with the letter "E"

Gemstone	Crystal System	Density	Hardness	Refractive index	Treatments
 <b>Ekanite</b>	cubic	3.28	6.0-6.5	1.597	none known
 <b><u>Emerald</u></b>	hexagonal	2.72	7.5-8.0	1.746-1.755	dying, fracture filling, oiling
 <b>Enstatite</b>	orthorombic	3.25	7.5-8.0	1.663-1.673	none known
 <b>Epidote</b>	monoclinic	3.40	7.5-8.0	1.729-1.768	none known
 <b>Euclase</b>	monoclinic	3.08	7.5	1.652-1.671	none known
 <b><u>Eudialyte</u></b>	trigonal	2.8-3.0	5-5 1/2	1.598-1.602	none







Gemstones that begin with the letter "F"

Gemstone	Crystal System	Density	Hardness	Refractive index	Treatments
 <b><u>Feldspar</u></b>	monoclinic	2.56	6.0-6.5	1.518-1.526	none known
 <b>Fluorite</b>	cubic	3.18	4.0	1.434	plastic or epoxy impregnation, irradiation, heating




Gemstones that begin with the letter "G"

Gemstone	Crystal System	Density	Hardness	Refractive index	Treatments
 <b>Gahnospinel</b>	cubic	4.01	7.5-8.0	1.760	none known
 <b><u>Garnet</u></b>	cubic	3.40	6.5-7.5	1.700-1.746	usually none; demantoid can be heated; lower quality garnets may be fracture filled
 <b>Glass</b>	amorphous	2.30-4.50	5 to 6	1.470-1.700	various coatings




### Gemstones that begin with the letter "H"

Gemstone	Crystal System	Density	Hardness	Refractive index	Treatments
 <u>Hackmanite</u>	isometric	2.29	6.00	1.483-1.487	none
 <u>Heliodor</u>	hexagonal	2.72	7.5-8.0	1.577-1.583	irradiation,heat
 <u>Hematite</u>	hexagonal	5.20	5.5-6.5	2.940-3.220	none known
 <u>Hemimorphite</u>	orthorhombic	3.45	4.5-5.0	1.614-1.636	none known
 <u>Horn</u>	organic	1.70-1.85	2.5	1.56	none known
 <u>Howlite</u>	monoclinic aggregate	2.58	3.5-4.0	1.586-1.605	dying


### Gemstones that begin with the letter "I"

Gemstone	Crystal System	Density	Hardness	Refractive index	Treatments
 <u>Idocrase</u>	tetragonal aggregate	3.40	6.5	1.713-1.718	none
 <u>Iolite</u>	orthorhombic	2.61	7.0-7.5	1.542-1.551	none
 <u>Ivory</u>	organic	1.85	2.25-2.75	1.54	dying, bleaching




### Gemstones that begin with the letter "J"

Gemstone	Crystal System	Density	Hardness	Refractive index	Treatments
 <u>Jadeite</u>	microcrystalline	3.34	6.5-7.0	1.660-1.680	dying
 <u>Jasper</u>	microcrystalline	2.65	7.0	1.564-1.660	none
 <u>Jet</u>	amorphous	1.32	2.5-4.0	1.660	none







Gemstones that begin with the letter "K"

Gemstone	Crystal System	Density	Hardness	Refractive index	Treatments
 <u>Kunzite</u>	monoclinic	3.18	6.0-7.0	1.660-1.676	light will fade

Gemstones that begin with the letter "L"

Gemstone	Crystal System	Density	Hardness	Refractive index	Treatments
 <u>Labradorite</u>	triclinic	2.70	6.5-6.5	1.660-1.680	none known
 <u>Lapis Lazuli</u>	various	2.75	5.50	1.500	none known
 <u>Lazulite</u>	monoclinic aggregate	3.09	5.0 to 6.0	1.612-1.643	none known


Gemstones that begin with the letter "M"

Gemstone	Crystal System	Density	Hardness	Refractive index	Treatments
 <u>Malachite</u>	microcrystalline	3.95	3.5-4.0	1.660-1.910	reconstitution
 <u>Marcasite</u>	orthorhombic	4.8-4.9	6.0-6.5	-	none
 <u>Maw Sit Sit</u>	aggregate	2.5 - 3.5	6.0-7.0	1.52 - 1.74	none
 <u>Moldavite</u>	amorphous	2.40	5.50	1.50	none
 <u>Moonstone</u>	monoclinic	2.56	6.0-6.5	1.518-1.526	none
 <u>Morganite</u>	hexagonal	2.72	7.5-8.0	1.577-1.583	radiation








Gemstones that begin with the letter "N"

Gemstone	Crystal System	Density	Hardness	Refractive index	Treatments
 <u>Nephrite</u>	microcrystalline	2.95	6.0-6.5	1.606-1.632	none

Gemstones that begin with the letter "O"

Gemstone	Crystal System	Density	Hardness	Refractive index	Treatments
 <u>Onyx</u>	microcrystalline	2.65	7.0	1.564-1.660	dying, filling
 <u>Opal</u>	amorphous	2.15	5.0-6.5	1.450	fracture filling





Gemstones that begin with the letter "P"

Gemstone	Crystal System	Density	Hardness	Refractive index	Treatments
 <u>Pearl</u>	organic	2.70	2.4-4.0	1.530-1.685	dying,bleaching
 <u>Peridot</u>	orthorhombic	3.34	6.5-7.9	1.654-1.690	none
 <u>Petalite</u>	monoclinic	2.40	6.0-6.5	1.504-1.56	none known
 <u>Phenakite</u>	trigonal	2.95	7.5-8.0	1.654-1.670	none known
 <u>Phosphophyllite</u>	monoclinic	3.08	3.0-3.5	1.595-1.616	none known
 <u>Prosopite</u>	monoclinic	2.88	4.5	1.501-1.510	none known
 <u>Pyrite</u>	cubic	5.00	5.0-6.5	2.940-3.220	none












Gemstones that begin with the letter "Q"

Gemstone	Crystal System	Density	Hardness	Refractive index	Treatments
 <u>Quartz</u>	hexagonal	2.66	7.0	1.544-1.553	fracture filling





### Gemstones that begin with the letter "R"

Gemstone	Crystal System	Density	Hardness	Refractive index	Treatments
 <b>Rhodochrosite</b>	hexagonal	3.60	3.5-4.5	1.597-1.817	none known
 <b>Rhodonite</b>	triclinic	3.50	5.5-6.5	1.733-1.747	none known
 <b>Rhodolite</b>	cubic	3.84	7.0-7.5	1.760	none
 <b>Ruby</b>	hexagonal	4.00	9	1.762-1.770	heat, fracture filling










### Gemstones that begin with the letter "S"

Gemstone	Crystal System	Density	Hardness	Refractive index	Treatments
 <b>Sapphire</b>	hexagonal	4.00	9	1.762-1.770	heat, fracture filling
 <b>Saussurite</b>	aggregate	3.30	6.5-7.0	spot:1.70 and 1.56	heat, fracture filling
 <b>Scapolite</b>	tetragonal	2.60	6.0-6.5	1.550-1.564	irradiation
 <b>Scheelite</b>	tetragonal	2.60	6.0-6.5	1.550-1.564	irradiation
 <b>Serpentine</b>	aggregate	2.57	2.5 to 6.0	1.560-1.570	dying, wax impregnation
 <b>Sillimanite</b>	orthorhombic	3.25	6.0-7.5	1.659-1.680	none known
 <b>Sinhilite</b>	orthorhombic	3.48	6.5-7.0	1.668-1.707	none known
 <b>Smithsonite</b>	trigonal	4.30	4.0-6.0	1.621-1.849	none known
 <b>Smoky Quartz</b>	hexagonal	2.66	7.0	1.544-1.553	none known
 <b>Sodalite</b>	cubic	2.25	5.0-6.0	1.483	none known
 <b>Sphalerite</b>	cubic	4.05	3.5-4.0	2.369-2.50 (increases with Fe content)	none known




 <b>Sphene</b>	monoclinic	3.52	5.0-5.5	1.900-2.034	none known
 <b><u>Spinel</u></b>	cubic	3.60	8	1.718	none known
 <b>Spodumene</b>	monoclinic	3.18	6.5-7.0	1.660-1.676	irradiation
 <b>Sugilite</b>	monoclinic	2.74	5.5-6.5	1.6071.610	non known

Gemstones that begin with the letter "T"

<b>Gemstone</b>	<b>Crystal System</b>	<b>Density</b>	<b>Hardness</b>	<b>Refractive index</b>	<b>Treatments</b>
 <b>Taaffeite</b>	hexagonal	3.61	8.0-8.5	1.719-.732	none known
 <b>Thomsonite</b>	aggregate	2.35	5.0-5.5	1.515-1.540	none known
 <b><u>Tanzanite</u></b>	orthorhombic	3.30	6.0-7.0	1.690-1.700	heat
 <b><u>Tiger-eye</u></b>	microcrystalline	2.64-2.71	7.0	1.540-1.550	bleaching w/ honey tigereye
 <b><u>Topaz</u></b>	orthorhombic	3.53	8.0	1.619-1.627	blue is irradiated
 <b><u>Tourmaline</u></b>	trigonal	3.06	7.0-7.5	1.624-1.644 (green)	heat
 <b><u>Tsavorite</u></b>	cubic	3.84	6.5 - 7	1.73 - 1.75	none
 <b>Tugtupite</b>	aggregate	2.36	4.0-6.5	1.496-1.502	none
 <b><u>Turquoise</u></b>	triclinic	2.73	5.0-6.0	1.610-1.650	dying, sealing

Gemstones that begin with the letter "U"

<b>Gemstone</b>	<b>Crystal System</b>	<b>Density</b>	<b>Hardness</b>	<b>Refractive index</b>	<b>Treatments</b>
 <b>Unakite</b>	rock	3.00	6-7	1.74 to 1.76; 1.55 or 1.52 depending on area tested	none
 <b><u>Uvarovite</u></b>	cubic	3.41-3.42	7.0-7.5	1.870	none

Gemstones that begin with the letter "V"

Gemstone	Crystal System	Density	Hardness	Refractive index	Treatments
 <a href="#">Variscite</a>	orthorhombic	2.50	4.0-5.0	1.560-1.590	none

Gemstones that begin with the letter "Z"

Gemstone	Crystal System	Density	Hardness	Refractive index	Treatments
 <a href="#">Zircon</a>	tetragonal	4.00	6.50	1.810-1.815	heat