

# Michigan Minerals Listed by Mineral Name

Based on MI DEQ GSD Bulletin 6 "Mineralogy of Michigan"

**Actinolite**, Dickinson, Gogebic, Gratiot, and Marquette counties

**Aegirinaugite**, Marquette County

**Aegirine**, Marquette County

**Albite**, Dickinson, Gratiot, Houghton, Keweenaw, and Marquette counties

**Algodonite**, Baraga, Houghton, Keweenaw, and Ontonagon counties

**Allanite**, Gogebic, Iron, and Marquette counties

**Almandite**, Dickinson, Keweenaw, and Marquette counties

**Alunite**, Iron County

**Analcite**, Houghton, Keweenaw, and Ontonagon counties

**Anatase**, Gratiot, Houghton, Keweenaw, Marquette, and Ontonagon counties

**Andalusite**, Iron, and Marquette counties

**Andesine**, Keweenaw County

**Andradite**, Dickinson County

**Anglesite**, Marquette County

**Anhydrite**, Bay, Berrien, Gratiot, Houghton, Isabella, Kalamazoo, Kent, Keweenaw, Macomb, Manistee, Marquette, Mason, Mecosta, Midland, Monroe, Muskegon, Newaygo, Ogemaw, Ontonagon, Osceola, St. Clair, and Wayne counties

**Ankerite**, Alpena, Houghton, Keweenaw, and Marquette counties

**Annabergite**, Keweenaw County

**Anorthite**, Dickinson County

**Anthonyite**, Houghton County

**Anthophyllite**, Dickinson, and Marquette counties

**Antigorite**, Dickinson, and Marquette counties

**Apatite**, Baraga, Dickinson, Houghton, Iron, Kalkaska, Keweenaw, Marquette, and Monroe counties

**Aphrosiderite**, Gogebic, Iron, and Marquette counties

**Apophyllite**, Houghton, and Keweenaw counties

**Aragonite**, Gogebic, Iron, Jackson, Marquette, and Monroe counties

**Arsenopyrite**, Marquette, and Menominee counties

**Atacamite**, Houghton, Keweenaw, and Ontonagon counties

**Augite**, Dickinson, Genesee, Gratiot, Houghton, Iron, Keweenaw, Marquette, and Ontonagon counties

**Awarurite**, Marquette County

**Axinite**, Gogebic, and Marquette counties

**Azurite**, Dickinson, Keweenaw, Marquette, and Ontonagon counties

**Babingtonite**, Keweenaw County

**Barite**, Alpena, Baraga, Eaton, Gogebic, Houghton, Iron, Keweenaw, Marquette, Monroe, and Ontonagon counties

**Bassetite**, Iron County

**Bastnaesite**, Ontonagon County

**Beryl**, Baraga, Dickinson, and Marquette counties

**Biotite**, Marquette County

**Bismuthinite**, Marquette County

**Blomstrandine**, Marquette County

**Bornite**, Gratiot, Houghton, Iron, Keweenaw, Marquette, and Ontonagon counties

**Brannerite**, Marquette County

**Braunite**, Iron, and Keweenaw counties

**Brochantite**, Keweenaw County

**Brookite**, Genesee, and Jackson counties

**Brucite**, Houghton, and Marquette counties

**Brunsvigite**, Marquette County

**Buttgenbachite**, Houghton County

**Bytownite**, Dickinson, and Keweenaw counties

**Calciovolborthite**, Keweenaw County

**Calcite**, Alpena, Arenac, Baraga, Calhoun, Chippewa, Dickinson, Eaton, Gogebic, Houghton, Huron, Iron, Jackson, Kent, Keweenaw, Marquette, Monroe, Ontonagon, Ottawa, Presque Isle, Shiawassee, St. Clair, St. and Joseph counties

**Calumetite**, Houghton County

**Carnallite**, Wayne County

**Celestite**, Chippewa, Eaton, Kent, Marquette, Monroe, Newaygo, and Wayne counties

**Chalcocite**, Baraga, Gogebic, Houghton, Iron, Keweenaw, Marquette, and Ontonagon counties

**Chalconatronite**, Houghton County

**Chalcopyrite**, Alpena, Baraga, Dickinson, Gogebic, Gratiot, Houghton, Iron, Keweenaw, Marquette, and Ontonagon counties

**Chamosite**, Gogebic, Houghton, Iron, Keweenaw, Marquette County

**Chloanthite**, Keweenaw County

**Chlorite**, Baraga, Dickinson, Gogebic, Gratiot, Houghton, Iron, Keweenaw, Marquette, and Ontonagon counties

**Chloritoid**, Houghton, Iron, Keweenaw, and Marquette counties

**Chromite**, Dickinson, Marquette, and Ontonagon counties

**Chromium Silicates**, Gogebic, and Marquette counties

**Chrysocolla**, Houghton, Keweenaw, and Ontonagon counties

**Chrysotile**, Dickinson, and Marquette counties

**Cinnabar**, Baraga County

**Clinochlore**, Baraga, and Marquette counties

**Clino-Chrysotile**, Marquette County

**Clinozoisite**, Dickinson, Houghton, Iron, Keweenaw, and Marquette counties

**Columbite**, Dickinson, and Marquette counties

**Copper**, Alpena, Baraga, Dickinson, Gogebic, Gratiot, Houghton, Iron, Kent, Keweenaw, Marquette, Ontonagon, and Tuscola counties

**Cordierite**, Marquette County

**Corundum**, Iron, Marquette, and Wayne counties

**Covellite**, Keweenaw, Marquette, and Ontonagon counties

**Cubanite**, Marquette County

**Cumingtonite**, Dickinson, and Marquette counties

**Cuprite**, Houghton, Keweenaw, and Ontonagon counties

**Datolite**, Houghton, Keweenaw, and Ontonagon counties

**Delessite**, Houghton, Keweenaw, and Ontonagon counties

**Diabantite**, Houghton, Keweenaw, and Marquette counties

**Diamond**, Cass, Ingham, Iron, and Kent counties

**Dickite**, Gogebic, Iron, and Marquette counties

**Digenite**, Gratiot, Keweenaw, and Ontonagon counties

**Diopside**, Dickinson, Houghton, Keweenaw, and Marquette counties

**Dioptase**, Ontonagon County

**Djurleite**, Keweenaw, and Ontonagon counties

**Dolomite**, Alpena, Charlevoix, Dickinson, Gogebic, Houghton, Huron, Iron, Jackson, Keweenaw, Mackinac, Marquette, Monroe, Newaygo, Ontonagon, Ottawa, and Wayne counties

**Domeykite**, Houghton, Keweenaw, and Ontonagon counties

**Enstatite**, Dickinson, Genesee, Iron, and Marquette counties

**Epidote**, Gratiot, Houghton, Keweenaw, Marquette, and Ontonagon counties

**Epsomite**, Wayne County

**Erythrite**, Keweenaw County

**Euclase**, Marquette County

**Euxenite**, Marquette County

**Faujasite**, Keweenaw, and Marquette counties

**Fluorite**, Bay, Dickinson, Eaton, Gogebic, Houghton, Isabella, Kalkaska, Keweenaw, Marquette, Monroe, Ontonagon, Wayne, and Wexford counties

**Freirinite**, Keweenaw County

**Fuchsitep**, Keweenaw County

**Galena**, Baraga, Branch, Dickinson, Dickinson, Eaton, Gogebic, Huron, Huron, Huron, Iron, Keweenaw, Marquette, Marquette, and Ontonagon counties

**Gibbsite**, Marquette County

**Glauconite**, Alger, Eaton, Huron, and Jackson counties

**Goethite**, Baraga, Calhoun, Dickinson, Gogebic, Iron, Jackson, Marquette, Monroe, Schoolcraft, Van and Buren counties

**Gold**, Allegan, Antrim, Baraga, Charlevoix, Dickinson, Emmet, Gogebic, Ingham, Ionia, Iron, Kalkaska, Kent, Leelanau, Livingston, Manistee, Marquette, Montcalm, Newaygo, Oakland, Oceana, Ontonagon, Ottawa, St. Joseph, and Wexford counties

**Graphite**, Baraga, Dickinson, Gogebic, Iron, Livingston, and Marquette counties

**Greenalite**, Dickinson, Gogebic, Iron, and Marquette counties

**Greenockite**, Iron, and Ontonagon counties

**Grunerite**, Baraga, Dickinson, Gogebic, Iron, and Marquette counties

**Guerinite**, Keweenaw County

**Gypsum**, Arenac, Baraga, Delta, Dickinson, Eaton, Gogebic, Houghton, Huron, Ionia, Iosco, Iron, Kent, Keweenaw, Mackinac, Marquette, Monroe, Newaygo, Ogemaw, Ontonagon, and Wayne counties

**Halite**, Alpena, Bay, Houghton, Manistee, Mason, Midland, Newaygo, Presque Isle, Saginaw, St. Clair, and Wayne counties

**Halloysite**, Marquette County

**Halotrichite**, Iron County

**Hausmannite**, Gogebic, Iron, and Marquette counties

**Hematite**, Dickinson, Gogebic, Houghton, Iron, Keweenaw, and Marquette counties

**Heulandite**, Keweenaw County

**Hisingerite**, Gogebic County

**Hollandite**, Keweenaw County

**Hornblende**, Dickinson, Gogebic, Iron, Keweenaw, and Marquette counties

**Hydrocarbon**, Ontonagon County

**Hydrohausmannite**, Iron County

**Hypersthene**, Genesee, Keweenaw, and Marquette counties

**Iddingsite**, Houghton, and Keweenaw counties

**Illite**, Baraga, Houghton, Iron, Marquette, and Ontonagon counties

**Imenite**, Dickinson, Genesee, Gratiot, Houghton, Iron, and Keweenaw counties

**Jacobsite**, Marquette County

**Julgoldite**, Keweenaw County

**Kamiokite**, Keweenaw County

**Kaolinite**, Gogebic, Houghton, Iron, Keweenaw, and Marquette counties

**Kinoite**, Houghton County

**Kutnahorite**, Marquette County

**Kyanite**, Genesee, Iron, and Marquette counties

**Labradorite**, Dickinson, Houghton, Iron, Keweenaw, Keweenaw, and Marquette counties

**Langite**, Keweenaw County

**Laumontite**, Dickinson, Gogebic, Houghton, and Keweenaw counties

**Lavendulan**, Keweenaw County

**Leonhardite**, Houghton, and Keweenaw counties

**Lepidocrocite**, Dickinson County

**Leucoxene**, Genesee, Houghton, and Keweenaw counties

**Lizardite**, Dickinson, and Marquette counties

**Mackinawite**, Marquette County

**Magnesiosussexite**, Gogebic County

**Magnetite**, Baraga, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Marquette, and Ontonagon counties

**Malachite**, Dickinson, Gogebic, Houghton, Keweenaw, Marquette, and Ontonagon counties

**Manganite**, Baraga, Gogebic, Houghton, Iron, Keweenaw, and Marquette counties

**Manganocalcite**, Marquette County

**Marcasite**, Alpena, Antrim, Baraga, Calhoun, Charlevoix, Chippewa, Dickinson, Eaton, Huron, Iron, Jackson, Marquette, Monroe, and Ontonagon counties

**Margarite**, Marquette County

**Maucherite**, Keweenaw County

**Melanterite**, Baraga, and Huron counties

**Melilite**, Houghton County

**Mesolite**, Iron, and Keweenaw counties

**Meta-Autunite**, Iron County

**Metatorbernite**, Iron County

**Metatyuyamunite**, Iron County

**Microcline**, Dickinson, Gogebic, Gratiot, Houghton, Iron, Keweenaw, Marquette, and Ontonagon counties

**Millerite**, Huron, and Marquette counties

**Minnesotaite**, Baraga, Gogebic, and Marquette counties

**Mirabilite**, Dickinson, and Houghton counties

**Molybdenite**, Dickinson, Gogebic, Marquette, and Ontonagon counties

**Monazite**, Houghton, and Marquette counties

**Montmorillonite**, Baraga, Emmet, Gogebic, Houghton, Marquette, Ontonagon, and Wexford counties

**Muscovite**, Dickinson, Gogebic, Houghton, Iron, Keweenaw, and Marquette counties

**Nacrite**, Marquette County

**Nantokite**, Ontonagon County

**Natrojarosite**, Iron County

**Natrolite**, Houghton, and Keweenaw counties

**Neltnerite**, Keweenaw County

**Neotocite**, Gogebic, and Iron counties

**Niccolite**, Keweenaw County

**Nontronite**, Dickinson, Gogebic, and Marquette counties

**Oligoclase**, Dickinson, and Marquette counties

**Olivenite**, Houghton County

**Olivine**, Houghton, Iron, Keweenaw, and Marquette counties

**Orientite**, Keweenaw County

**Orthoclase**, Houghton, Keweenaw, and Marquette counties

**Palygorskite**, Baraga, and Gogebic counties

**Paragonite**, Dickinson, and Marquette counties

**Paramelaconite**, Ontonagon County

**Pararammelsbergite**, Keweenaw County

**Paratacamite**, Houghton, and Ontonagon counties

**Pargasite**, Marquette County

**Patricianite**, Keweenaw County

**Pectolite**, Keweenaw County

**Pennine**, Dickinson, Houghton, and Keweenaw counties

**Pentlandite**, Marquette County

**Pharmacolite**, Keweenaw County

**Phlogopite**, Dickinson, Iron, and Marquette counties

**Picropharmacolite**, Keweenaw County

**Pigeonite**, Dickinson, Iron, Keweenaw, Marquette, and Ontonagon counties

**Plancheite**, Ontonagon County

**Polyhalite**, Newaygo, and Wayne counties

**Posnjakite**, Keweenaw County

**Powellite**, Houghton, and Marquette counties

**Prehnite**, Gratiot, Houghton, Keweenaw, and Ontonagon counties

**Prochlorite**, Houghton, Keweenaw, and Marquette counties

**Pseudomalachite**, Marquette County

**Psilomelane**, Calhoun, Dickinson, Gogebic, Iron, and Marquette counties

**Pumpellyite**, Houghton, and Keweenaw counties

**Pyrite**, Alger, Alpena, Antrim, Baraga, Branch, Calhoun, Clare, Dickinson, Eaton, Gogebic, Gratiot, Houghton, Huron, Iron, Jackson, Keweenaw, Marquette, Monroe, Newaygo, Ogemaw, Ontonagon, Presque Isle, Saginaw, Washtenaw, and Wayne counties

**Pyrolusite**, Baraga, Calhoun, Gogebic, Iron, Keweenaw, and Marquette counties

**Pyrope**, Iron County

**Pyrophyllite**, Marquette County

**Pyrostilpnite**, Marquette County

**Pyrrhotite**, Dickinson, Houghton, Iron, and Marquette counties

**Quartz**, Alger, Antrim, Arenac, Charlevoix, Chippewa, Dickinson, Gogebic, Houghton, Huron, Iron, Keweenaw, Luce, Marquette, Monroe, Ontonagon, Schoolcraft, Van Buren, and Wayne counties

**Rammelsbergite**, Keweenaw County

**Rauenthalite**, Keweenaw County

**Rhodochrosite**, Gogebic, Houghton, Iron, Keweenaw, and Marquette counties

**Rhodonite**, Iron, and Marquette counties

**Riebeckite**, Dickinson, Gogebic, and Marquette counties

**Rutherfordine**, Dickinson County

**Rutile**, Iron, and Marquette counties

**Sanidine**, Iron, Keweenaw, and Ontonagon counties

**Saponite**, Houghton, Keweenaw, and Ontonagon counties

**Scapolite**, Dickinson County

**Scheelite**, Marquette County

**Schefferite**, Marquette County

**Seamanite**, Iron County

**Siderite**, Alpena, Branch, Dickinson, Eaton, Gogebic, Houghton, Huron, Iron, and Marquette counties

**Sillimanite**, Iron, and Marquette counties

**Silver**, Baraga, Dickinson, Houghton, Iron, Keweenaw, Livingston, Marquette, and Ontonagon counties

**Smaltite**, Keweenaw County

**Spessartite**, Marquette County

**Sphalerite**, Alpena, Baraga, Branch, Eaton, Gogebic, Huron, Iron, Keweenaw, Marquette, Ontonagon, and Tuscola counties

**Sphene**, Gogebic, Gratiot, Houghton, Iron, Marquette, and Ontonagon counties

**Spinel**, Huron, Iron, and Marquette counties

**Spodumene**, Marquette County

**Staurolite**, Baraga, Dickinson, Iron, and Marquette counties

**Stilbite**, Houghton, and Keweenaw counties

**Stilpnomelane**, Gogebic, Iron, and Marquette counties

**Strontianite**, Alpena, Iron, and Monroe counties

**Sulfur**, Monroe County

**Sussexite**, Iron County

**Sylvite**, Midland, and Newaygo counties

**Synchisite**, Ontonagon County

**Talc**, Dickinson, Gogebic, Iron, and Marquette counties

**Tellurium**, Marquette County

**Tenorite**, Keweenaw, and Ontonagon counties

**Tetrahedrite**, Marquette county

**Thomsonite**, Alger, Houghton, and Keweenaw counties

**Thuringite**, Houghton, and Keweenaw counties

**Tourmaline**, Dickinson, Houghton, Iron, Marquette, and Monroe counties

**Tremolite**, Dickinson, Gogebic, Gratiot, Houghton, Iron, and Marquette counties

**Trichalcite**, Keweenaw County

**Tridymite**, Ontonagon County

**Tyrolite**, Keweenaw County

**Uraninite**, Dickinson, and Iron counties

**Uvarovite**, Genesee County

**Vermiculite**, Houghton, Keweenaw, and Marquette counties

**Violarite**, Marquette County

**Vivianite**, Eaton County

Vladimirite, Keweenaw County

Wollastonite, Dickinson, and Keweenaw counties

Wurtzite, Ontonagon County

Xonotlite, Keweenaw County

Zircon, Dickinson, Houghton, Keweenaw, Marquette,  
and Ontonagon counties

Zoisite, Dickinson, and Genesee counties

Zonochlorite, Keweenaw County

# Michigan Minerals Listed by County

**Alger County**, Glaucosite, Pyrite, Quartz,  
Thomsonite

**Allegan County**, Gold

**Alpena County**, Ankerite, Barite, Calcite,  
Chalcopyrite, Copper, Dolomite, Halite, Marcasite,  
Pyrite, Siderite, Sphalerite, Strontianite

**Antrim County**, Gold, Marcasite, Pyrite, Quartz

**Arenac County**, Calcite, Gypsum, Quartz

**Baraga County**, Algodonite, Apatite, Barite, Beryl,  
Calcite, Chalcocite, Chalcopyrite, Chlorite, Cinnabar,  
Clinocllore, Copper, Galena, Goethite, Gold,  
Graphite, Grunerite, Gypsum, Illite, Magnetite,  
Manganite, Marcasite, Melanterite, Minnesotaite,  
Montmorillonite, Palygorskite, Pyrite, Pyrolusite,  
Silver, Sphalerite, Staurolite

**Bay County**, Anhydrite, Fluorite, Halite

**Berrien County**, Anhydrite

**Branch County**, Galena, Pyrite, Siderite,  
Sphalerite

**Calhoun County**, Calcite, Goethite, Marcasite,  
Psilomelane, Pyrite, Pyrolusite

**Cass County**, Diamond

**Charlevoix County**, Dolomite, Gold, Marcasite,  
Quartz

**Chippewa County**, Calcite, Celestite, Marcasite,  
Quartz

**Clare County**, Pyrite

**Delta County**, Gypsum

**Dickinson County**, Actinolite, Albite, Almandite,  
Andradite, Anorthite, Anthophyllite, Antigorite,  
Apatite, Augite, Azurite, Beryl, Bytownite, Calcite,  
Chalcopyrite, Chlorite, Chromite, Chrysotile,  
Clinzoisite, Columbite, Copper, Cumingtonite,  
Diopside, Dolomite, Enstatite, Fluorite, Galena,  
Galena, Goethite, Gold, Graphite, Greenalite,  
Grunerite, Gypsum, Hematite, Hornblende, Ilmenite,  
Labradorite, Laumontite, Lepidocrocite, Lizardite,

Magnetite, Malachite, Marcasite, Microcline,  
Mirabilite, Molybdenite, Muscovite, Nontronite,  
Oligoclase, Paragonite, Pennine, Phlogopite,  
Pigeonite, Psilomelane, Pyrite, Pyrrhotite, Quartz,  
Riebeckite, Rutherfordine, Scapolite, Siderite, Silver,  
Staurolite, Talc, Tourmaline, Tremolite, Uraninite,  
Wollastonite, Zircon, Zoisite

**Eaton County**, Barite, Calcite, Celestite, Fluorite,  
Galena, Glaucosite, Gypsum, Marcasite, Pyrite,  
Siderite, Sphalerite, Vivianite

**Emmet County**, Gold, Montmorillonite

**Genesee County**, Augite, Brookite, Enstatite,  
Hypersthene, Ilmenite, Kyanite, Leucocoxene,  
Uvarovite, Zoisite

**Gogebic County**, Actinolite, Allanite,  
Aphrosiderite, Aragonite, Axinite, Barite, Calcite,  
Chalcocite, Chalcopyrite, Chamosite, Chlorite,  
Chromium Silicates, Copper, Dickite, Dolomite,  
Fluorite, Galena, Goethite, Gold, Graphite,  
Greenalite, Grunerite, Gypsum, Hausmannite,  
Hematite, Hisingerite, Hornblende, Kaolinite,  
Laumontite, Magnesiosussexite, Magnetite,  
Malachite, Manganite, Microcline, Minnesotaite,  
Molybdenite, Montmorillonite, Muscovite, Neotocite,  
Nontronite, Palygorskite, Psilomelane, Pyrite,  
Pyrolusite, Quartz, Rhodochrosite, Riebeckite,  
Siderite, Sphalerite, Sphene, Stilpnomelane, Talc,  
Tremolite

**Gratiot County**, Actinolite, Albite, Anatase,  
Anhydrite, Augite, Bornite, Chalcopyrite, Chlorite,  
Copper, Digenite, Epidote, Ilmenite, Microcline,  
Prehnite, Pyrite, Sphene, Tremolite

**Houghton County**, Albite, Algodonite, Analcite,  
Anatase, Anhydrite, Ankerite, Anthonyite, Apatite,  
Apophyllite, Atacamite, Augite, Barite, Bornite,  
Brucite, Buttgenbachite, Calcite, Calumetite,  
Chalcocite, Chalconatronite, Chalcopyrite,  
Chamosite, Chlorite, Chloritoid, Chrysocolla,  
Clinzoisite, Copper, Cuprite, Datolite, Delessite,  
Diabantite, Diopside, Dolomite, Domeykite, Epidote,  
Fluorite, Gypsum, Halite, Hematite, Iddingsite, Illite,  
Ilmenite, Kaolinite, Kinoite, Labradorite, Laumontite,  
Leonhardite, Leucocoxene, Magnetite, Malachite,  
Manganite, Melilite, Microcline, Mirabilite, Monazite,  
Montmorillonite, Muscovite, Natrolite, Olivenite,  
Olivine, Orthoclase, Paratacamite, Pennine,  
Powellite, Prehnite, Prochlorite, Pumpellyite, Pyrite,  
Pyrrhotite, Quartz, Rhodochrosite, Saponite,  
Siderite, Silver, Sphene, Stilbite, Thomsonite,



Thuringite, Tourmaline, Tremolite, Vermiculite, Zircon

**Huron County**, Calcite, Dolomite, Galena, Galena, Galena, Glauconite, Gypsum, Marcasite, Melanterite, Millerite, Pyrite, Quartz, Siderite, Sphalerite, Spinel

**Ingham County**, Diamond, Gold

**Ionia County**, Gold, Gypsum

**Iosco County**, Gypsum

**Iron County**, Allanite, Alunite, Andalusite, Apatite, Aphrosiderite, Aragonite, Augite, Barite, Bassetite, Bornite, Braunite, Calcite, Chalcocite, Chalcopyrite, Chamosite, Chlorite, Chloritoid, Clinozoisite, Copper, Corundum, Diamond, Dickite, Dolomite, Enstatite, Galena, Goethite, Gold, Graphite, Greenalite, Greenockite, Grunerite, Gypsum, Halotrichite, Hausmannite, Hematite, Hornblende, Hydrohausmannite, Illite, Ilmenite, Kaolinite, Kyanite, Labradorite, Magnetite, Manganite, Marcasite, Mesolite, Meta-Autunite, Metatorbernite, Metatyuyamunite, Microcline, Muscovite, Natrojarosite, Neotocite, Olivine, Phlogopite, Pigeonite, Psilomelane, Pyrite, Pyrolusite, Pyrope, Pyrrhotite, Quartz, Rhodochrosite, Rhodonite, Rutile, Sanidine, Seamanite, Siderite, Sillimanite, Silver, Sphalerite, Sphene, Spinel, Staurolite, Stilpnomelane, Strontianite, Sussexite, Talc, Tourmaline, Tremolite, Uraninite

**Isabella County**, Anhydrite, Fluorite

**Jackson County**, Aragonite, Brookite, Calcite, Dolomite, Glauconite, Goethite, Marcasite, Pyrite

**Kalamazoo County**, Anhydrite

**Kalkaska County**, Apatite, Fluorite, Gold

**Kent County**, Anhydrite, Calcite, Celestite, Copper, Diamond, Gold, Gypsum

**Keweenaw County**, Albite, Algodonite, Almandite, Analcite, Anatase, Andesine, Anhydrite, Ankerite, Annabergite, Apatite, Apophyllite, Atacamite, Augite, Azurite, Babingtonite, Barite, Bornite, Braunite, Brochantite, Bytownite, Calciovolborthite, Calcite, Chalcocite, Chalcopyrite, Chamosite, Chloanthite, Chlorite, Chloritoid, Chrysocolla, Clinozoisite, Copper, Covellite, Cuprite, Datolite, Delessite, Diabantite, Digenite, Diopside, Djurleite, Dolomite, Domeykite, Epidote, Erythrite, Faujasite, Fluorite, Freirinite, Fuchsite, Galena,

Guerinite, Gypsum, Hematite, Heulandite, Hollandite, Hornblende, Hypersthene, Iddingsite, Ilmenite, Julgoldite, Kamiokite, Kaolinite, Labradorite, Labradorite, Langite, Laumontite, Lavendulan, Leonhardite, Leucoxene, Magnetite, Malachite, Manganite, Maucherite, Mesolite, Microcline, Muscovite, Natrolite, Neltnerite, Niccolite, Olivine, Orientite, Orthoclase, Pararammelsbergite, Patricianite, Pectolite, Pennine, Pharmacolite, Picropharmacolite, Pigeonite, Posnjakite, Prehnite, Prochlorite, Pumpellyite, Pyrite, Pyrolusite, Quartz, Rammelsbergite, Rauenthalite, Rhodochrosite, Sanidine, Saponite, Silver, Smaltite, Sphalerite, Stilbite, Tenorite, Thomsonite, Thuringite, Trichalcite, Tyrolite, Vermiculite, Vladimireite, Wollastonite, Xonotlite, Zircon, Zonochlorite

**Leelanau County**, Gold

**Livingston County**, Gold, Graphite, Silver

**Luce County**, Quartz

**Mackinac County**, Dolomite, Gypsum

**Macomb County**, Anhydrite

**Manistee County**, Anhydrite, Gold, Halite

**Marquette County**, Actinolite, Aegirinaugite, Aegirine, Albite, Allanite, Almandite, Anatase, Andalusite, Anglesite, Anhydrite, Ankerite, Anthophyllite, Antigorite, Apatite, Aphrosiderite, Aragonite, Arsenopyrite, Augite, Awarurite, Axinite, Azurite, Barite, Beryl, Biotite, Bismuthinite, Blomstrandine, Bornite, Brannerite, Brucite, Brunsvigite, Calcite, Celestite, Chalcocite, Chalcopyrite, Chamosite, Chlorite, Chloritoid, Chromite, Chromium Silicates, Chrysotile, Clinocllore, Clino-Chrysotile, Clinozoisite, Columbite, Copper, Cordierite, Corundum, Covellite, Cubanite, Cummingtonite, Diabantite, Dickite, Diopside, Dolomite, Enstatite, Epidote, Euclase, Euxenite, Faujasite, Fluorite, Galena, Galena, Gibbsite, Goethite, Gold, Graphite, Greenalite, Grunerite, Gypsum, Halloysite, Hausmannite, Hematite, Hornblende, Hypersthene, Illite, Jacobsite, Kaolinite, Kutnahorite, Kyanite, Labradorite, Lizardite, Mackinawite, Magnetite, Malachite, Manganite, Manganocalcite, Marcasite, Margarite, Microcline, Millerite, Minnesotaitite, Molybdenite, Monazite, Montmorillonite, Muscovite, Nacrite, Nontronite, Oligoclase, Olivine, Orthoclase, Paragonite, Pargasite, Pentlandite, Phlogopite, Pigeonite, Powellite, Prochlorite, Pseudomalachite, Psilomelane, Pyrite, Pyrolusite, Pyrophyllite, Pyrostilpnite, Pyrrhotite, Quartz, Rhodochrosite, Rhodonite, Riebeckite, Rutile, Scheelite, Schefferite,

Siderite, Sillimanite, Silver, Spessartite, Sphalerite, Sphene, Spinel, Spodumene, Staurolite, Stilpnomelane, Talc, Tellurium, Tetrahedrite, Tourmaline, Tremolite, Vermiculite, Violarite, Zircon

**Mason County**, Anhydrite, Halite

**Mecosta County**, Anhydrite

**Menominee County**, Arsenopyrite

**Midland County**, Anhydrite, Halite, Sylvite

**Monroe County**, Anhydrite, Apatite, Aragonite, Barite, Calcite, Celestite, Dolomite, Fluorite, Goethite, Gypsum, Marcasite, Pyrite, Quartz, Strontianite, Sulfur, Tourmaline

**Montcalm County**, Gold

**Muskegon County**, Anhydrite

**Newaygo County**, Anhydrite, Celestite, Dolomite, Gold, Gypsum, Halite, Polyhalite, Pyrite, Sylvite

**Oakland County**, Gold

**Oceana County**, Gold

**Ogemaw County**, Anhydrite, Gypsum, Pyrite

**Ontonagon County**, Algodonite, Analcite, Anatase, Anhydrite, Atacamite, Augite, Azurite, Barite, Bastnaesite, Bornite, Calcite, Chalcocite, Chalcopyrite, Chlorite, Chromite, Chrysocolla, Copper, Covellite, Cuprite, Datolite, Delessite,

Digenite, Diopside, Djurleite, Dolomite, Domeykite, Epidote, Fluorite, Galena, Gold, Greenockite, Gypsum, Hydrocarbon, Illite, Magnetite, Malachite, Marcasite, Microcline, Molybdenite, Montmorillonite, Nantokite, Paramelaconite, Paratacamite, Pigeonite, Plancheite, Prehnite, Pyrite, Quartz, Sanidine, Saponite, Silver, Sphalerite, Sphene, Synchronite, Tenorite, Tridymite, Wurtzite, Zircon

**Osceola County**, Anhydrite

**Ottawa County**, Calcite, Dolomite, Gold

**Presque Isle County**, Calcite, Halite, Pyrite

**Saginaw County**, Halite, Pyrite

**Schoolcraft County**, Goethite, Quartz

**Shiawassee County**, Calcite

**St. Clair County**, Anhydrite, Calcite, Halite

**St. Joseph County**, Calcite, Gold

**Tuscola County**, Copper, Sphalerite

**Van Buren County**, Goethite, Quartz

**Washtenaw County**, Pyrite

**Wayne County**, Anhydrite, Carnallite, Celestite, Corundum, Dolomite, Epsomite, Fluorite, Gypsum, Halite, Polyhalite, Pyrite, Quartz

**Wexford County**, Fluorite, Gold, Montmorillonite

# Mineral Names and Chemical Formulas

Actinolite .....	$\text{Ca}_2(\text{Mg}, \text{Fe}^{++})_5\text{Si}_8\text{O}_{22}(\text{OH})_2$	Kaolinite .....	$\text{Al}_2\text{Si}_2\text{O}_5(\text{OH})_4$
Almandine .....	$\text{Fe}^{++}_3\text{Al}_2(\text{SiO}_4)_3$	Kyanite .....	$\text{Al}_2\text{SiO}_5 = \text{Al}[6]\text{Al}[6]\text{OSiO}_4$
Amalgam .....	$\text{Ag}_2\text{Hg}_3$	Labradorite .....	$(\text{Ca}, \text{Na})(\text{Si}, \text{Al})_4\text{O}_8$
Amber .....	$[\text{C}, \text{H}, \text{O}]$	Laumontite .....	$\text{CaAl}_2\text{Si}_4\text{O}_{12} \cdot 4(\text{H}_2\text{O})$
Analcime .....	$\text{NaAlSi}_2\text{O}_6 \cdot (\text{H}_2\text{O})$	Lechatelierite .....	$\text{SiO}_2$
Andalusite .....	$\text{Al}_2\text{SiO}_5 = \text{Al}[6]\text{Al}[5]\text{OSiO}_4$	Lepidolite .....	$\text{K}(\text{Li}, \text{Al})_3(\text{Si}, \text{Al})_4\text{O}_{10}(\text{F}, \text{OH})_2$
Andesine .....	$(\text{Na}, \text{Ca})(\text{Si}, \text{Al})_4\text{O}_8$	Magnesite .....	$\text{MgCO}_3$
Andradite .....	$\text{Ca}_3\text{Fe}^{+++}_2(\text{SiO}_4)_3$	Magnetite .....	$\text{Fe}^{++}\text{Fe}^{+++}_2\text{O}_4$
Anhydrite .....	$\text{CaSO}_4$	Malachite .....	$\text{Cu}_2(\text{CO}_3)(\text{OH})_2$
Ankerite .....	$\text{Ca}(\text{Fe}^{++}, \text{Mg}, \text{Mn})(\text{CO}_3)_2$	Marcasite .....	$\text{FeS}_2$
Anorthite .....	$\text{CaAl}_2\text{Si}_2\text{O}_8$	Melanophlogite .....	$\text{SiO}_2$
Anthophyllite .....	$\text{Mg}_7\text{Si}_8\text{O}_{22}(\text{OH})_2$	Mercury .....	$\text{Hg}$
Apatite .....	$\text{Ca}_5(\text{PO}_4)_3(\text{OH}, \text{F}, \text{Cl})$	Mesolite .....	$\text{Na}_2\text{Ca}_2\text{Al}_6\text{Si}_9\text{O}_{30} \cdot 8(\text{H}_2\text{O})$
Apophyllite .....	$\text{KCa}_4(\text{Si}_4\text{O}_{10})_2\text{F} \cdot 8(\text{H}_2\text{O})$	Microcline .....	$\text{KAlSi}_3\text{O}_8$
Aragonite .....	$\text{CaCO}_3$	Millerite .....	$\text{NiS}$
Augite .....	$(\text{Ca}, \text{Na})(\text{Mg}, \text{Fe}, \text{Al}, \text{Ti})(\text{Si}, \text{Al})_2\text{O}_6$	Muscovite .....	$\text{KAl}_2(\text{Si}_3\text{Al})\text{O}_{10}(\text{OH}, \text{F})_2$
Azurite .....	$\text{Cu}_3(\text{CO}_3)_2(\text{OH})_2$	Natrolite .....	$\text{Na}_2\text{Al}_2\text{Si}_3\text{O}_{10} \cdot 2(\text{H}_2\text{O})$
Barite .....	$\text{BaSO}_4$	Oligoclase .....	$(\text{Na}, \text{Ca})(\text{Si}, \text{Al})_4\text{O}_8$
Biotite .....	$\text{K}(\text{Mg}, \text{Fe}^{++})_3(\text{Al}, \text{Fe}^{+++})\text{Si}_3\text{O}_{10}(\text{OH}, \text{F})_2$	Olivine .....	$(\text{Mg}, \text{Fe})_2\text{SiO}_4$
Bytownite .....	$(\text{Ca}, \text{Na})(\text{Si}, \text{Al})_4\text{O}_8$	Opal .....	$\text{SiO}_2 \cdot n(\text{H}_2\text{O})$
Calcite .....	$\text{CaCO}_3$	Orthoclase .....	$\text{KAlSi}_3\text{O}_8$
Cassiterite .....	$\text{SnO}_2$	Paranatrolite .....	$\text{Na}_2\text{Al}_2\text{Si}_3\text{O}_{10} \cdot 3(\text{H}_2\text{O})$
Celestine .....	$\text{SrSO}_4$	Plagioclase .....	$(\text{Na}, \text{Ca})(\text{Si}, \text{Al})_4\text{O}_8$
Chabazite .....	$\text{CaAl}_2\text{Si}_4\text{O}_{12} \cdot 6(\text{H}_2\text{O})$	Prehnite .....	$\text{Ca}_2\text{Al}_2\text{Si}_3\text{O}_{10}(\text{OH})_2$
Chalcocite .....	$\text{Cu}_2\text{S}$	Psilomelane .....	$(\text{Ba}, \text{H}_2\text{O})_2\text{Mn}_5\text{O}_{10}$
Cinnabar .....	$\text{HgS}$	Pumpellyite .....	$\text{Ca}(\text{Al}, \text{Mg}, \text{Fe})_3(\text{SiO}_4)_3(\text{OH}) \cdot (\text{H}_2\text{O})$
Clinocllore .....	$(\text{Mg}, \text{Fe}^{++})_5\text{Al}(\text{Si}_3\text{Al})\text{O}_{10}(\text{OH})_8$	Pyrite .....	$\text{FeS}_2$
Coesite .....	$\text{SiO}_2$	Pyrope .....	$\text{Mg}_3\text{Al}_2(\text{SiO}_4)_3$
Copper .....	$\text{Cu}$	Quartz .....	$\text{SiO}_2$
Corundum .....	$\text{Al}_2\text{O}_3$	Ramsdellite .....	$\text{MnO}_2$
Covellite .....	$\text{CuS}$	Sanidine .....	$(\text{K}, \text{Na})(\text{Si}, \text{Al})_4\text{O}_8$
Cristobalite .....	$\text{SiO}_2$	Scapolite .....	$(\text{Na}, \text{Ca})_4[(\text{Al}, \text{Si})_4\text{O}_8]_3(\text{Cl}, \text{CO}_3)$
Cummingtonite .....	$\text{Mg}_7\text{Si}_8\text{O}_{22}(\text{OH})_2$	Schorl .....	$\text{NaFe}^{++}_3\text{Al}_6(\text{BO}_3)_3\text{Si}_6\text{O}_{18}(\text{OH})_4$
Cuprite .....	$\text{Cu}_2\text{O}$	Scolecite .....	$\text{CaAl}_2\text{Si}_3\text{O}_{10} \cdot 3(\text{H}_2\text{O})$
Datolite .....	$\text{CaBSiO}_4(\text{OH})$	Seamanite .....	$\text{Mn}_3(\text{PO}_4)\text{B}(\text{OH})_6$
Diamond .....	$\text{C}$	Siderite .....	$\text{Fe}^{++}\text{CO}_3$
Diopside .....	$\text{CaMgSi}_2\text{O}_6$	Sillimanite .....	$\text{Al}_2\text{SiO}_5 = \text{Al}[6]\text{Al}[4]\text{OSiO}_4$
Dolomite .....	$\text{CaMg}(\text{CO}_3)_2$	Silver .....	$\text{Ag}$
Edingtonite .....	$\text{BaAl}_2\text{Si}_3\text{O}_{10} \cdot 4(\text{H}_2\text{O})$	Spessartine .....	$\text{Mn}^{++}_3\text{Al}_2(\text{SiO}_4)_3$
Enstatite .....	$\text{Mg}_2\text{Si}_2\text{O}_6$	Sphalerite .....	$(\text{Zn}, \text{Fe})\text{S}$
Epidote .....	$\text{Ca}_2(\text{Fe}^{+++}, \text{Al})_3(\text{SiO}_4)_3(\text{OH}) =$	Staurolite .....	$(\text{Fe}^{++}, \text{Mg}, \text{Zn})_2\text{Al}_9(\text{Si}, \text{Al})_4\text{O}_{22}(\text{OH})_2$
Fayalite .....	$\text{Fe}^{++}_2\text{SiO}_4$	Stishovite .....	$\text{SiO}_2$
Fluorite .....	$\text{CaF}_2$	Sulfur .....	$\text{S}_8$
Forsterite .....	$\text{Mg}_2\text{SiO}_4$	Sylvite .....	$\text{KCl}$
Galena .....	$\text{PbS}$	Talc .....	$\text{Mg}_3\text{Si}_4\text{O}_{10}(\text{OH})_2$
Goethite .....	$\text{Fe}^{+++}\text{O}(\text{OH})$	Tetranatrolite .....	$\text{Na}_2\text{Al}_2\text{Si}_3\text{O}_{10} \cdot 2(\text{H}_2\text{O})$
Gold .....	$\text{Au}$	Thomsonite .....	$\text{NaCa}_2\text{Al}_5\text{Si}_5\text{O}_{20} \cdot 6(\text{H}_2\text{O})$
Gonnardite .....	$\text{Na}_2\text{CaAl}_4\text{Si}_6\text{O}_{20} \cdot 7(\text{H}_2\text{O})$	Titanite .....	$\text{CaTiSiO}_5 = \text{CaTiOSiO}_4$
Graphite .....	$\text{C}$	Topaz .....	$\text{Al}_2\text{SiO}_4(\text{F}, \text{OH})_2$
Grossular .....	$\text{Ca}_3\text{Al}_2(\text{SiO}_4)_3$	Tosudite .....	$\text{Na}_0,5(\text{Al}, \text{Mg})_6(\text{Si}, \text{Al})_8\text{O}_{18}(\text{OH})_{12} \cdot 5(\text{H}_2\text{O})$
Gypsum .....	$\text{CaSO}_4 \cdot 2(\text{H}_2\text{O})$	Tremolite .....	$\text{Ca}_2\text{Mg}_5\text{Si}_8\text{O}_{22}(\text{OH})_2$
Halite .....	$\text{NaCl}$	Tridymite .....	$\text{SiO}_2$
Hedenbergite .....	$\text{CaFe}^{++}\text{Si}_2\text{O}_6$	Uvarovite .....	$\text{Ca}_3\text{Cr}_2(\text{SiO}_4)_3$
Hematite .....	$\text{Fe}_2\text{O}_3$	Wollastonite .....	$\text{CaSiO}_3$
Hypersthene .....	$(\text{Mg}, \text{Fe}^{++})_2\text{Si}_2\text{O}_6$		