

Figure 1: 2018 list of critical minerals, as defined by Executive Order 1381

Critical Mineral Commodity	Sectors						Top Producer Globally	Top U.S. Supplier	Notable Example Application
	Aerospace (non-defense)	Defense	Energy	Telecommunications & electronics	Transportation (non-aerospace)	Other			
Aluminum	X	X	X	X	X	X	China	Canada	Aircraft, power transmission lines, lightweight alloys
Antimony		X	X	X	X	X	China	China	Lead-acid batteries
Arsenic		X	X	X		X	China	China	Microwave communications (gallium arsenide)
Barite			X	X			China	China	Oil and gas drilling fluid
Beryllium	X	X	X	X		X	United States	Kazakhstan	Satellite communications, beryllium metal for aerospace
Bismuth		X	X	X		X	China	China	Pharmaceuticals, lead-free solders
Cesium and rubidium	X	X	X	X		X	Canada	Canada	Medical applications, global positioning satellites, night-vision devices
Chromium	X	X	X	X	X	X	South Africa	South Africa	Jet engines (superalloys), rechargeable batteries
Cobalt	X	X	X	X	X	X	Congo (Kinshasa)	Norway	Jet engines (superalloys), stainless steel
Fluorspar			X	X		X	China	Mexico	Aluminum and steel production, uranium processing
Gallium	X	X	X	X		X	China	China	Radar, light-emitting diodes (LEDs), cellular phones
Germanium	X	X	X	X		X	China	China	Infrared devices, fiber optics
Graphite (natural)	X	X	X	X	X	X	China	China	Rechargeable batteries, body armor
Helium				X		X	United States	Qatar	Cryogenic [magnetic resonance imaging (MRI)]
Indium	X	X	X	X		X	China	China	Flat-panel displays (indium-tin-oxide), specialty alloys
Lithium	X	X	X	X	X	X	Australia	Chile	Rechargeable batteries, aluminum-lithium alloys for aerospace
Magnesium	X	X	X	X	X	X	China	Israel	Incendiary countermeasures for aerospace

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Manganese	X	X	X	X	X	X	China	South Africa	Aluminum and steel production, lightweight alloys
Niobium	X	X	X	X		X	Brazil	Brazil	High-strength steel for defense and infrastructure
Platinum group metals	X		X	X	X	X	South Africa	South Africa	Catalysts, superalloys for jet engines
Potash			X	X		X	Canada	Canada	Agricultural fertilizer
Rare earth elements	X	X	X	X	X	X	China	China	Aerospace guidance, lasers, fiber optics
Rhenium	X		X	X		X	Chile	Chile	Jet engines (superalloys), catalysts
Scandium	X	X	X	X		X	China	China	Lightweight alloys, fuel cells
Strontium	X	X	X	X	X	X	Spain	Mexico	Aluminum alloys, permanent magnets, flares
Tantalum	X	X	X	X		X	Rwanda	China	Capacitors in cellular phones, jet engines (superalloys)
Tellurium		X	X	X		X	China	Canada	Infrared devices (night-vision), solar cells
Tin		X		X		X	China	Peru	Solder, flat-panel displays (indium-tin-oxide)
Titanium	X	X	X	X		X	China	South Africa	Jet engines (superalloys) and airframes (titanium alloys), armor
Tungsten	X	X	X	X		X	China	China	Cutting and drilling tools, catalysts, jet engines (superalloys)
Uranium	X	X	X			X	Kazakhstan	Canada	Nuclear applications, medical applications
Vanadium	X	X	X	X		X	China	South Africa	Jet engines (superalloys) and airframes (titanium alloys), high-strength steel
Zirconium and hafnium	X	X	X	X		X	Australia	China	Thermal barrier coating in jet engines, nuclear applications