The **United States Geological Survey** has released a new list of 50 mineral commodities critical to the U.S. economy and national security after an extensive multi-agency assessment. To access this list, <u>click here</u>

The 2022 list of critical minerals includes the following — click a mineral's name to find relevant statistics and publications:

- 1. <u>Aluminum</u>, used in almost all sectors of the economy
- 2. <u>Antimony</u>, used in lead-acid batteries and flame retardants
- 3. <u>Arsenic</u>, used in semi-conductors
- 4. <u>Barite</u>, used in hydrocarbon production.
- 5. <u>Beryllium</u>, used as an alloying agent in aerospace and defense industries
- 6. <u>Bismuth</u>, used in medical and atomic research
- 7. <u>Cerium</u>, used in catalytic converters, ceramics, glass, metallurgy, and polishing compounds
- 8. <u>Cesium</u>, used in research and development
- 9. <u>Chromium</u>, used primarily in stainless steel and other alloys
- 10. <u>Cobalt</u>, used in rechargeable batteries and superalloys
- 11. <u>Dysprosium</u>, used in permanent magnets, data storage devices, and lasers
- 12. Erbium, used in fiber optics, optical amplifiers, lasers, and glass colorants
- 13. Europium, used in phosphors and nuclear control rods
- 14. <u>Fluorspar</u>, used in the manufacture of aluminum, cement, steel, gasoline, and fluorine chemicals
- 15. <u>Gadolinium</u>, used in medical imaging, permanent magnets, and steelmaking
- 16. Gallium, used for integrated circuits and optical devices like LEDs
- 17. <u>Germanium</u>, used for fiber optics and night vision applications
- 18. Graphite, used for lubricants, batteries, and fuel cells
- 19. <u>Hafnium</u>, used for nuclear control rods, alloys, and high-temperature ceramics
- 20. <u>Holmium</u>, used in permanent magnets, nuclear control rods, and lasers
- 21. Indium, used in liquid crystal display screens
- 22. Iridium, used as coating of anodes for electrochemical processes and as a chemical catalyst
- 23. <u>Lanthanum</u>, used to produce catalysts, ceramics, glass, polishing compounds, metallurgy, and batteries
- 24. <u>Lithium</u>, used for rechargeable batteries
- 25. <u>Lutetium</u>, used in scintillators for medical imaging, electronics, and some cancer therapies
- 26. <u>Magnesium</u>, used as an alloy and for reducing metals
- 27. <u>Manganese</u>, used in steelmaking and batteries
- 28. <u>Neodymium</u>, used in permanent magnets, rubber catalysts, and in medical and industrial lasers
- 29. <u>Nickel</u>, used to make stainless steel, superalloys, and rechargeable batteries
- 30. <u>Niobium</u>, used mostly in steel and superalloys
- 31. <u>Palladium</u>, used in catalytic converters and as a catalyst agent
- 32. <u>Platinum</u>, used in catalytic converters
- 33. <u>Praseodymium</u>, used in permanent magnets, batteries, aerospace alloys, ceramics, and colorants
- 34. <u>Rhodium</u>, used in catalytic converters, electrical components, and as a catalyst
- 35. <u>Rubidium</u>, used for research and development in electronics
- 36. <u>Ruthenium</u>, used as catalysts, as well as electrical contacts and chip resistors in computers
- 37. <u>Samarium</u>, used in permanent magnets, as an absorber in nuclear reactors, and in cancer treatments
- 38. <u>Scandium</u>, used for alloys, ceramics, and fuel cells
- 39. <u>Tantalum</u>, used in electronic components, mostly capacitors and in superalloys

- 40. <u>Tellurium</u>, used in solar cells, thermoelectric devices, and as alloying additive
- 41. <u>Terbium</u>, used in permanent magnets, fiber optics, lasers, and solid-state devices
- 42. <u>Thulium</u>, used in various metal alloys and in lasers
- 43. <u>Tin</u>, used as protective coatings and alloys for steel
- 44. <u>Titanium</u>, used as a white pigment or metal alloys
- 45. <u>Tungsten</u>, primarily used to make wear-resistant metals
- 46. <u>Vanadium</u>, primarily used as alloying agent for iron and steel
- 47. <u>Ytterbium</u>, used for catalysts, scintillometers, lasers, and metallurgy
- 48. <u>Yttrium</u>, used for ceramic, catalysts, lasers, metallurgy, and phosphors
- 49. <u>Zinc</u>, primarily used in metallurgy to produce galvanized steel
- 50. <u>Zirconium</u>, used in the high-temperature ceramics and corrosion-resistant alloys.