Minor Metals:

A Market Analysis

2018

Thintri, Inc. announces the release of

Minor Metals: A Market Analysis,
a new report that explores markets
in minor metals. Minor metals are
generally defined as those not sourced
directly but that rather occur as
byproducts in sourcing base metals.
This report covers the minor metals
excluding rare earths, precious metals
and platinum group metals, leaving the
remaining 25 metals offering a broad
range of characteristics, applications
and market opportunities.

Thintri's report assesses sourcing and applications for each metal, cautions such as health, safety, and/or environmental concerns, and projects market growth and prices over the forecast period. Market forecasts are provided going out to 2024.



Thintri Inc.

Thintri Inc. provides business and market intelligence for a wide range of technologies through custom consulting, technology assessments, and published market studies.

- Materials
- Electronics
- Telecommunications
- Photonics
- Manufacturing



Contents

Minor Metals included in the report:

- Antimony
- Arsenic
- Beryllium
- Bismuth
- Cadmium
- Chromium
- Cobalt
- Gallium
- Germanium
- Hafnium
- Indium
- Lithium
- Magnesium

- Manganese
- Mercury
- Molybdenum
- Niobium
- Selenium
- Silicon
- Tantalum
- Tellurium
- Titanium
- Tungsten
- Vanadium
- 7irconium

Each chapter covers a single metal and includes the following sections:

- Background
- Sourcing and Production
- Safety, Health, and the Environment
- Applications
- Market Analysis

Background on Minor Metals

"Minor metals" are anything but. The 25 metals covered in this report, which excludes rare earths, precious metals and platinum group metals, are found in a wide range of industries. Minor metals, many of them irreplaceable in critical applications, in most cases are not sourced directly but only by their presence with other base metal ores with their own distinct markets. This characteristic often separates supply from actual market demand and creates fluctuations in price and availability. Some important minor metals are found in only a few, sometimes politically unstable countries, further contributing to market instability. Toxic metals like mercury and arsenic face dwindling markets as health and environmental regulations make their continued use problematic, while cadmium, also highly toxic, faces even more stringent regulation combined with growing demand in electronics and solar power.

The Thintri market study, *Minor Metals:* A *Market Analysis*, provides, for each minor metal included in the report, background information and a study of sourcing and production, as well as discussion of environmental, health, safety and nutrition issues. Each metal is also subjected to an analysis of current applications and market, with forecasts for demand going out to 2024, and price projections based on the influences of relevant markets and the factors affecting those markets.

Understand the Markets

Commodities, in their demand and prices, have had a few difficult years, and this certainly includes minor metals. The picture has improved, and present expert opinion presents a more favorable outlook for the forecast period. The Thintri study, *Minor* Metals: A Market Analysis, begins with an analysis of the end markets that most affect demand and availability for minor metals in general, such as currency markets, aerospace and defense, semiconductors, electronics, consumer products, automotive and others. The suitability of substitutes for some metals and their likely effects on demand are also discussed for individual metals.

Many minor metals are important constituents of more than one end market, and the report's market forecasts balance the relative influence of these various factors on overall demand and pricing.

For many of the metals covered in the report, the forecast period represents a time of significant opportunity. For others, the future is bleak. And for a number, life will continue on pretty much as it has in the past. Thintri's study, *Minor Metals: A Market Analysis*, provides a basis for the evaluation of opportunities for these metals in investment and trading, their availability and suitability for manufacture and production of numerous products, and a survey of the commercial and industrial landscape affecting these materials.



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