Future availability & supplies – A few facts & figures about our raw materials

Static Lifetime

Reserves | Resources

as of 2015

2015 | 2100 | 2200 | 2300 | 2400 | 2500

◀ **Reserves** are the volumes of raw materials that can technically and economically be expected to be mined.

◀ **Resources** are the amount of raw materials that are believed to exist but are unable to be mined with today's technology.

▶ **Substitutability** sheds light on how well a raw material can be replaced by another without this impacting negatively on the quality or effectiveness of the product.

	Reserves	Resources
Indium	2028	2154
Zinc	2030	2172
Chromium	2033	2477
Gold	2034	NDA**
Tungsten	2053	NDA**
Copper	2054	2166
Zircon	2070	2113
Cobalt	2072	2274
Niobium	2092	NDA**
Tantalum	2098	NDA**
Titanium	2145	2473
PGMs platinum group metals	2186	2445
Phosphorus (phosphate)	2324	3669 ⟶
Gallium	5233 / 12704 ⟶	

Supply Risks & Economic Importance

critical | not critical | NDA**

A standardised scale, ranging between 0 and 10, was created for 'Economic Importance' and 'Supply Risks'. Supplies of a raw material are classified as critical when the economic importance of the raw material exceeds the threshold value of 5 and the supply risks the threshold value of 1.

as of 2015

Recycling Rates

as of 2013, all figures are percentages

Indium	0
Zinc	8
Chromium	13
Gold	25
Tungsten	37
Copper	20
Zircon	NDA**
Cobalt	16
Niobium	11
Tantalum	4
Titanium	6
PGMs	35
Phosphorus	0
Gallium	0

Substitutability Index

(0 = not possible / 1 = very good)* as of 2013

Indium	0.18
Zinc	0.34
Chromium	0.04
Gold	0.28
Tungsten	0.30
Copper	0.38
Zircon	NDA**
Cobalt	0.29
Niobium	0.31
Tantalum	0.45
Titanium	0.67
PGMs	0.17
Phosphorus	0.02
Gallium	0.40

* The standardised scale (0 = very good, 1 = not possible) has been reversed here to make the chart clearer.

Source: CUTEC Study "Prüfung und Aktualisierung von Rohstoffparametern", 2016

** NDA = no data available

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