



Corrigendum to “Critical raw materials in the global high-throughput ceramic industry” [Sustainable Materials and Technologies 39 (2024) e00832]

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The authors regret that an error in the unit of the global output of boron occurred: the correct value is 4.13 million tons per year of borates, corresponding to 2.29 million tons B₂O₃ in 2018. Thus, the presumable consumption of borates by the ceramic industry (around 250,000 tons per year, B₂O₃ content) corresponds to 11 ± 1% of the global output of

borates. In comparison, estimates from the mining industry (Orocobre 2019 Annual Report; EtiMaden 2022 Boron Report) place the borate demand for the production of ceramic frits at a share of 14%, corresponding to approximately 320,000 tons per year (B₂O₃ content).

The correct version of Fig. 3 is the following:

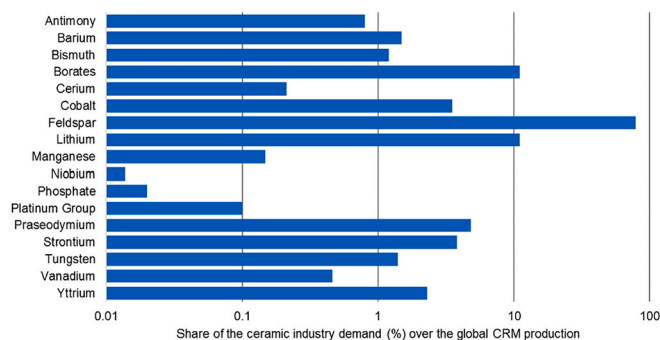


Fig. 3. Consumption of CRMs by the ceramic industry (share of the global CRM production).

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The correct version of Table 4, for the row concerning borates, is the following:

Table 4

Share of CRMs used in the high-throughput ceramic industry on the global production, past and expected market trends [1] and price variation [2].

Critical Raw Material	Global demand by the ceramic industry (tons)	Share of the ceramic industry over the global CRM production	Global CRM demand		Price variation	
			2016–2022	2023–2030	2016–2022	2023–2030
Borates, B ₂ O ₃	~250,000	11%	–20%	+20%	+20%	increase

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The authors would like to apologise for any inconvenience caused.

References

- [1] SCREEN, Factsheets Updates: Boron/Borates. <https://screen.eu/crms-2023/>, 2023.
- [2] U.S. Geological Survey, Mineral Commodity Summaries, 2023, <https://doi.org/10.3133/mcs2023>.