

Proposed Reclassification of Metallic Beryllium under GB CLP Regulation

Background

Beryllium is primarily used in its metallic, insoluble form in commercial applications. It is essential to differentiate between metallic beryllium and beryllium soluble compounds in regulatory classifications to accurately reflect their respective health risks and ensure that worker protections correspond to the specific form of beryllium exposure encountered. The current CLP classifications must urgently be revised to reflect critical scientific distinctions, rather than continuing to apply a uniform approach that disregards the complexity of available evidence.

Proposed Classification

To better align hazard classification with the latest scientific evidence and enhance worker safety, we propose reconsidering the current carcinogenic classification of metallic beryllium. Based on recent research, regarding the health effect of beryllium to the lungs, removing the carcinogen classification entirely and classifying metallic beryllium solely under STOT RE – H372¹ would more accurately reflect the risks of Chronic Beryllium Disease (CBD) associated with chronic exposure by inhalation.

Scientific Justification

Our position is supported by the most recent and extensive epidemiological data, including the largest beryllium mortality study ever conducted, involving over 17,000 workers across 15 facilities with 95 years of follow-up². This landmark study uniquely distinguishes between exposure to soluble and insoluble forms of beryllium, demonstrating no significant increase in lung cancer or mortality among workers exposed exclusively to insoluble metallic beryllium, the form most widely used commercially. These findings, published in the *Journal of Occupational and Environmental Medicine*, provide critical evidence for differentiating classification. Ongoing research will continue to refine the scientific understanding and regulatory approach.

¹ Specific Target Organ Toxicity – Repeated Exposure - *Causes damage to organs (the lung) through prolonged or repeated exposure (by inhalation)*.

² Fordyce, T. A., Leonhard, M. J., Jung, A. M., Lin, J., Watson, H., Heldt, G. H., & Boffetta, P. (2025). *An updated mortality study of beryllium workers, 1925-2020. Journal of Occupational and Environmental Medicine*. Advance online publication. <https://doi.org/10.1097/JOM.0000000000003463>

Path Forward

We remain committed to working closely with regulatory authorities and stakeholders to ensure that classification frameworks evolve in line with advancing scientific knowledge. Implementing a distinct classification for metallic beryllium grounded in the latest evidence will enhance hazard communication and worker protection while promoting regulatory proportionality and clarity.

About BeST

The Beryllium Science and Technology Association (BeST) represents the manufacturers, suppliers and users of beryllium metal, beryllium containing alloys and beryllium oxide ceramics in the EU market. BeST has the objective of promoting sound policies, regulations, science and actions related to the safe use of beryllium and to serve as an expert resource for the international community on the benefits and criticality of beryllium applications. It is also the objective of BeST to promote good practices in the workplace to protect workers handling beryllium containing materials.
