KEY POINTS

- **Beryllium is a critical material and the material of choice for a variety of industry sectors.**

- **The health risk induced by Beryllium metal is only in the workplace, by inhalation of fine particles, if not properly controlled.**

- **An OEL of 0.6 µg/m3 Inhalable 8-h TWA (i.e. 600 ng/m3) has proven to be safe and is scientifically supportable. Our experience has shown that it is generally technologically and economically feasible for governmental agencies, researchers and industries that rely on beryllium containing materials to advance waste minimization, energy efficiency, reliability, and reduced raw material utilization. BeST endorses the ACSH recommendation (Advisory Committee for Safety and Health at work), published in May 2017, to implement an OEL of 600 ng/m^3 Inhalable 8-h TWA.**

- **Lowering the OEL to below 0.6 µg/m3 would have a negative effect on availability of products, employment, SMEs, and current research activities. Lowering an OEL to below 0.6 µg/m3 would severely impact the EU Strategic Materials Initiatives regarding beryllium.**

- **Recent studies have confirmed that the current classification for beryllium metal is not correct and needs to be changed.**

- **BeST welcomes the conclusion of the Risk Management Option Analysis (RMOA), conducted by the BAuA in Germany, that an inclusion in the REACH candidate list and an authorization process is not needed for Beryllium Metal (publication December 2016).**

A CRITICAL MATERIAL

Beryllium has recently (September 2017) been designated by the European Commission as one of twenty-seven materials critical to the EU. A raw material is labeled "critical" when the risks for supply shortage and their impacts on the economy are high compared with most of the other raw materials

BERYLLIUM IS IN NATURE

A natural element throughout the globe, beryllium is commonly found in:

Soils and in minerals like coal

In vegetables and foodstuffs

Because beryllium is a naturally occurring element, it is present in many industrial, construction and household products; e.g., ceiling tiles, fertilizers, detergents, charcoal and kitty litter, concrete block, concrete floors, metals and roofing materials that comprise the building's structure.

APPLICATIONS IN EUROPE

Specific beryllium applications in Europe:

Aerospace and Defence

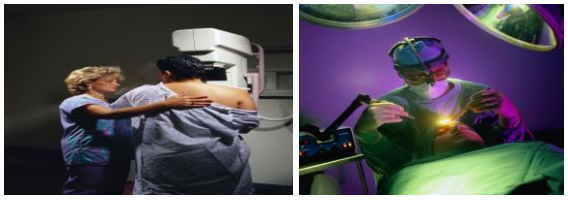
Electronics

Energy

ITER Reactor Oil Drilling

Telecommunications

Medical Industries



BERYLLIUM RESEARCH

Our beryllium worker protection initiatives are based on the knowledge and understanding gained from over thirteen years of cooperative research efforts on the epidemiology related to the various chemical forms of beryllium. We have been responsive to the EU REACH legislation that is designed to provide safety, health, environmental and use information about chemical substances to the European Chemicals Agency (ECHA). Test results clearly indicated that beryllium metal should not be classified as a skin irritant, an eye irritant, an acute inhalation toxin, a skin sensitizer, or orally toxic, as it is today. OECD compliant genotoxicity tests using beryllium metal powder, covering gene mutation**,** chromosome aberration, DNA repair and its inhibition, did not reveal any genotoxic potential for beryllium metal when extracted under simulated lung conditions. Beryllium is used by industries in Europe exclusively in insoluble metallic massive forms, mostly as alloying element in copper. Beryllium metal does not represent the same risks as soluble forms of beryllium, not used in Europe, and its **current classification is not correct and needs to be changed.**

An OEL no lower than 0.6 µg/m^3 inhalable 8h-TWA *is protective and is technologically and economically feasible* for governmental agencies, researchers and industries that rely on beryllium containing materials to advance waste minimization, energy efficiency, reliability, and reduced raw material utilization. best has implemented a Product Stewardship Program (Be Responsible) based on the feasible and protective OEL of 0.6 ng/m^3 Inhalable 8-h TWA.

See www.berylliumsafety.eu

BERYLLIUM

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CRITICAL MATERIAL

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Beryllium Science & Technology Association

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