

Quarterly

NEWS LETTER

SPRING ISSUE 2019

BeST

Beryllium Science & Technology Association



Dear Valued Readers,

Welcome to the spring edition 2019 of the Quarterly Newsletter.

In this edition, BeST addresses the upcoming new worker protection standard for beryllium and provides valuable information on how companies can adhere to it. As the inherent risk of beryllium is limited to the work place by inhalation, BeST welcomes this new European binding occupational exposure limit which will provide legal certainty, harmonised protection of workers and a level playing field in the EU.

In addition, you will learn of BeST's successes over the past few years in the field of Occupational Health and Safety.

Learn also about BeST's participation in the EU-OSHA Healthy Workplaces Campaign and of our Be Responsible Voluntary Product Stewardship Programme.

We wish you a very pleasant reading.

Kind Regards,

Prof. Dr. Andreas Köster, Chairman of BeST

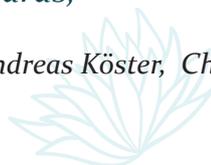


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Industry Welcomes new worker protection standard for beryllium

After several years of thorough study and consideration, the EU is adopting a new worker protection standard for beryllium. Industry welcomes the new standard which will guarantee legal certainty, harmonised protection of workers and a level playing field in the EU.

The standard will be laid down in the Carcinogens and Mutagens Directive. The new worker protection standard for beryllium and its inorganic compounds features a binding OEL of 600 ng/m³ – inhalable fraction – 8-hour Time Weighted Average - for a seven-year transitional period. Industry welcomes this OEL, which will apply until 2026, as it is in line with BeST's recommendation, represents the best scientific evidence, and is economically and technically feasible for companies.

In order to assist companies to meet the new standard, BeST has developed its Be Responsible Voluntary Product Stewardship Programme.

The Be Responsible Programme utilises a Recommended Exposure Guideline (REG) of 600 ng/m³ (Inhalable sampling method) which has proven effective in protecting all workers from developing chronic beryllium disease (CBD).

In addition, the Be Responsible Programme utilises a comprehensive Beryllium Worker Protection Model which is based on eight elements that have been developed from research to practice experiences. This model is not a one size fits all approach and end users may need all or only part of this model in their workplace to effectively protect workers.

These eight elements explain how to protect workers who are processing beryllium and the adequate controls to implement in order to allow workers to safely manage the material.

For each element, videos with avatars to emulate real life health and safety situations are provided on the appositive website www.berylliumsafty.eu

The above programme will aid companies to adhere to EU legislation on beryllium and its inorganic compounds.

Read BeST's official press release [here](#).

Worldwide producers of Beryllium gather in Brussels for the BeST 2019 AGM

In early 2019, BeST members gathered in Brussels in occasion of the BeST 2019 Annual General Meeting to celebrate BeST's achievements over the past few years as well as address the upcoming challenges of the beryllium industry. The General meeting also saw the external participation of Ms. Brenda O'Brien, Manager of the Brussels liaison Office of the European Agency for Safety and Health at work (EU-OSHA), who shared information on EU-OSHA's two-year workplace campaign entitled "Healthy Workplaces Manage Dangerous Substances" of which BeST is an official campaign partner.

On 10 January 2019, all BeST members gathered in Brussels to participate to the BeST 2019 Annual General Meeting. In such occasion, Members recalled BeST's achievements over the past few years in the field of Occupational Health and Safety, where BeST's recommendation for a balanced and feasible binding occupational exposure limit for beryllium in the EU is currently being endorsed by the European institutions, the launch of the Beryllium Industry's Voluntary Product Stewardship Programme, which seeks to continuously improve workers safety during the processing of beryllium-containing materials, and the development of raising awareness campaigns on the importance of beryllium.

The meeting was also an occasion to address the upcoming challenges that the beryllium industry will face in the coming years and the importance of adequately informing EU and National policymakers on the uses of beryllium and its role in maintaining the European industry at the cutting edge of innovation in the future.



From left to right: Christof Alfermann from Schmelzmetall, Christophe Lepout-Samzum from NGK BERYLCO, Peter Mählmann from Tropag, Ted Knduson from Materion, Angélique Renier from NGK BERYLCO, Brenda O'Brein from EU-OSHA, Andreas Köster from Tropag, Barbara A Abeles from CBL Ceramics LTD and Darryl Campling from the UK Atomic Energy Authority.

Finally, Ms. Brenda O'Brien, Manager of the Brussels liaison Office of the European Agency for Safety and Health at work (EU-OSHA), shared information EU-OSHA's two-year workplace campaign entitled "Healthy Workplaces Manage Dangerous Substances". BeST is official campaign partner.

Further information on the campaign can be found below.

BeST receives award as EU-OSHA official campaign partner

BeST received an award for the work accomplished in the field of the Healthy Workplaces Campaign on managing dangerous substances at the EU-OSHA Good Practice Exchange event and Award Ceremony held in Brussels on 05 and 06 March 2019. The two-day event featured several discussions on occupational safety and health (OSH).



EU-OSHA official Campaign partners participating to the EU-OSHA Good Practice Exchange event and Award Ceremony in Brussels

BeST participated in the EU-OSHA Good Practice Exchange event and Award Ceremony on 05 and 06 March 2019 in Brussels. The event marked the 10th anniversary of the campaign partnership scheme of the European Agency for Safety and Health at work (EU-OSHA).

The two-day event featured several plenary talks and practical workshops offering participants the opportunity to share their experiences on a range of subjects related to occupational safety and health (OSH).

BeST received an award for its work in the field of the Healthy Workplaces Campaign on managing dangerous substances.

The 2018/2019 Healthy Workplaces Manage Dangerous Substances Campaign aims to:

Raise awareness of the importance of preventing risks from dangerous substances at the workplace

Promote a culture of risk prevention to effectively manage the risks associated with such substances

Provide technical tools and examples of good practices

Provide guidance on the legislative framework

Through the “Be Responsible” Voluntary Product Stewardship Programme and the participation as an official campaign partner of the campaign on Healthy Workplaces Manage Dangerous Substances 2018-2019, BeST is committed to improving and raising awareness on the protection of workers handling beryllium and beryllium containing materials at the workplace.



Learn more on the campaign [here](#).

Learn more on the Be Responsible Programme [here](#).



ITER to receive new funding

The European Parliament has recently voted to extend funding to the ITER project for the 2021-2027 period. With the approval by the European Parliament, the ITER project can be added to the EU's upcoming overall long-term budget.

In the ITER project, twelve (12) tonnes of Beryllium will be used as armour for the plasma-facing first wall panels fitted inside the Tokamak - a surface of approximately 610 m², in addition to a beryllium bead blanket layer behind the first wall.

Beryllium has been chosen for its good thermal properties - as it can accommodate the high heat fluxes on the first wall (up to 5 MW/m²) - and for its low atomic number, which in the case of loss of magnetic control of the plasma, would minimize radiation heat loss which otherwise might lead to unacceptable cooling of the hot fusion plasma, and so prevent uncontrolled reactions.



DID YOU KNOW?

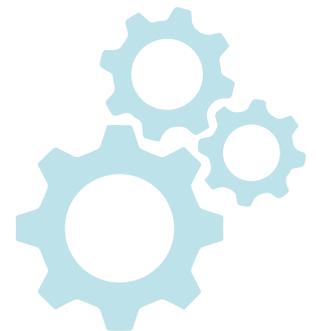
Do you know where and why beryllium is used?

Beryllium is used as an alloying element in copper for its extreme reliability in automobile connectors for air-bag crash sensor and deployment systems and anti-lock brake systems.

Beryllium is used as an alloying element in copper in critical connections and relays in electrical, electronic and telecommunications equipment to guarantee communications with emergency services.

Beryllium is used as an alloying element in copper in life saving medical applications such as the connections in medical operating theatre and monitoring equipment.

Beryllium is used as an alloying element in copper in no-fail aircraft electrical and electronic connectors which enable fly-by-wire commercial airlines to obtain fuel efficiencies.



Would you feel safe without beryllium?



Copper beryllium alloys are the most effective copper alloys in term of electrical and thermal conductivity, mechanical strength and formability. These alloys further your safety in many applications and enable miniaturization and sustainability of many Electrical and Electronic Equipment. No other copper alloy can feature this unique combination of properties.



The BeST website keeps you informed with a 'Latest news' section, where readers can follow the latest news and features on beryllium.

The news section complements the wealth of information already on the site, on issues such as environment, health and safety.

Get the latest news on **BeST online**.

BeST can also be found on Facebook. 'Like' **the page** and be notified when there is news from our association. Photos of events organised by BeST can also be found on our **Facebook page**.

BeST

Beryllium Science & Technology Association

FUN FACTS

1

Thermal conductivity of Beryllium is extremely high. This is one of the reasons why beryllium-containing materials are so necessary in the electronics industry.

2

Beryllium is not at all magnetic. It is because of this property that radar systems and radios are fine-tuned using this metal.

3

Because of its relative transparency to X-Rays, **Beryllium is used as foils in X-Ray emitter windows.**

4

In order to make spark-proof tools, an alloy of Copper and Beryllium is used.