

Quarterly

NEWS LETTER

AUTUMN ISSUE 2020

BeST

Beryllium Science & Technology Association



Dear Valued Readers,

Welcome to the Autumn edition 2020 of the Quarterly Newsletter.

In this edition, BeST will provide an update on the recently published EU Critical Raw Materials List, EU Commission Work Programme for 2021 and the Chemicals Strategy for Sustainability.

In addition, we will provide insight on how Brexit may affect upcoming chemicals legislation and touch on BeST's most recent webinar on Working Safely with Beryllium.

We wish you a very pleasant reading.

Kind Regards,

Prof Dr. Andreas Köster, Chairman of BeST

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Beryllium Keeps its Spot on the EU Critical Raw Materials List

Good news for those utilizing the unique and enabling properties of beryllium! The European Commission will continue classifying beryllium as a critical raw material for the EU at least until 2023. Beryllium has been listed as a critical raw material to the EU since the introduction of the list in 2011, which is up for review every three years. The EU's list for 2020 now contains 30 materials, and includes bauxite, lithium, titanium and strontium for the first time.

To meet upcoming EU Green Deal goals, beryllium will be critical in electrical, electronic and communications equipment (such as 5G networks) as well as automotive, aerospace, medical, energy and defence components. Investing in greener technology in these industries will be key to reducing the planet's enormous appetite for resources.

The EU Critical Raw Materials List is a list of all of the crucial materials needed to protect people and the environment. For instance, to build more advanced electric vehicle batteries, the EU will need up to 18 times more lithium and five times more cobalt by 2030 compared to current supply in the whole EU economy.

Fortunately, there is huge resource potential to produce materials on the CRM list within the EU, which will help to secure European supply chains. Ultimately, the EU hopes to positively influence the methods by which third countries produce raw materials, bringing them in line with the EU's green standards.

What Does the UK Stand to Lose in REACH Harmonisation with a “No Deal” Brexit?

As the UK enters the final months of its transition period away from the EU, the lack of information on how to prepare for January 2021 poses many challenges to companies in the UK, particularly those who work with chemicals. Regardless of the outcome of free trade negotiations, the UK will implement its own REACH system, but failed negotiations also mean no access to chemicals data in the EU. Companies may have to fully re-register chemicals in the UK, which could come at huge costs.

In a webinar hosted by the British Chamber of Commerce, head of the UK Law Society Helen Raulus stated that the UK would ideally like to employ a “lift and shift” strategy in developing any of its new laws. However, restricted access to EU REACH data would make this an impossibility. If terms are not established, UK companies will be required to either perform their own testing and research, which could set the UK back multiple years before a harmonised raw materials list was established, or purchase pre-existing research from the EU which would put additional costs on individual businesses, particularly SMEs. It would additionally be costly and time consuming for companies to have to register both in the EU and UK, especially if the two sets of regulations lack harmonisation.

According to Marco Mensink, director-general of Cefic, the European Chemical Industry Council stated that there will be a “duplication in the system of Europe REACH into UK REACH - double registration, double data, double the cost”. Mr Mensink added it was imperative that the deal, if done, includes a full annex on chemicals to ease trade in an industry that is essential to manufacturing, from pharmaceuticals to foods, and automotive to aerospace.

Luckily, EU chief negotiator Michel Barnier and UK negotiators will be negotiating every day from 22 October until January 1 to work towards reaching an agreement on every trading point. Additionally, Defra state that they will be extending the deadline to complete the full UK REACH registrations from two years to six to ease transitional difficulties from the EU REACH, which should reduce the time pressure to make the switch.

The UK is an important market for the beryllium industry and BeST is actively following the ongoing negotiations.

BeST Holds Beryllium Safety Webinar in German

On 13 October, BeST hosted its second Be Responsible Webinar – Working Safely with Beryllium in German. During the webinar, BeST member Peter Mählmann discussed beryllium and specific industrial hygiene practices to help ensure worker protection. During his presentation, Mr Mählmann touched upon the different regulatory frameworks, REACH and OSH, their deliverables and the interfaces between them.

Mr Mählmann began by explaining the establishment process of the binding EU occupational exposure limit (BOEL) for beryllium under the CMD Directive, giving an overview of the different regulatory provisions and guidelines for training that exist to ensure proper worker protection. Additionally, he spoke specifically on the Be Responsible – Beryllium Voluntary Product Stewardship Program (VPSP), which was launched in 2017.

Mr. Mählmann informed the audience that the Be Responsible programme is a voluntary health and safety programme developed by the beryllium industry and launched in March

2017. Be Responsible addresses health and safety concerns during the processing of beryllium-containing alloys and how the Be Responsible programme can be used to improve workplace safety through the Beryllium Worker Protection Model. The actions and information contained in this programme can be used to address concerns in industries processing other metals or substances which have the potential to cause health hazards to workers by inhalation.

Additionally, he gave an overview of the different control strategies, i.e. the measures to be implemented to control dust emission and dispersion for the most frequent operations, within the Voluntary Product Stewardship Program. Participants, which included German and Austrian industrial hygienists and company representatives, provided positive feedback on the webinar. The next Working Safely with Beryllium webinar will be held in French in December 2020.

More information about this programme can be found [here](#).

European Commission Adopts Chemicals Strategy for Sustainability

On 14 October, the European Commission adopted a Chemicals Strategy for Sustainability. During the press conference, European Commission Executive Vice President for the European Green Deal Frans Timmermans said the EU will prioritize 'prohibit[ng the] use of hazardous chemicals in consumer products' and that they will take concrete actions to support the green transition of the chemicals industry. Commissioner for the Environment Virginijus Sinkevicius explained that the EU will take a more preventive approach on chemicals.

BeST has noted that the EU addressed some of its concerns during the public consultation stage in the final text. In the comments to the EU Commission, BeST stated that 'the economic importance of beryllium was established due to its very unique combination of properties that make it non-substitutable in many high-tech applications which would suffer a loss in performance if it were to be substituted'. As a member of the CRM

Alliance, BeST is pleased to see continued, tailored support for CRMs in the published Chemicals Strategy for Sustainability.

However, many concerns remain due to the liberal use of 'restricting or substituting substances of concern' in the text of the Chemicals Strategy. As beryllium is considered a substance of concern and a carcinogen 1B, BeST remains vigilant to avoid new measures which could come into place without proper socio-economic and risk assessment or accounting for beryllium's OELs, established to safeguard worker health. BeST will continue to monitor and advocate for the safe use of beryllium in any case where the Commission could misinterpret the metal as harmful to society.

To read more about the publication, click [here](#).

EU Commission Publishes the Work Programme 2021

On 19 October, the Commission published its Work Programme for 2021. The Work Programme includes 44 new policy objectives, 14 proposals for withdrawal, 50 ongoing priority files, and 41 initiatives for regulatory simplification. These fall under six headline ambitions: The European Green Deal, A Europe fit for the digital age, An economy that works for people, A stronger Europe in the world, Promoting our European way of life, and A new push for European democracy.

In the wake of the global pandemic, the Commission has declared its focus in the year ahead will be twofold. It will firstly continue to work on managing the crisis, whilst also looking to seize the opportunity following Next-GenerationEU and its new long-term budget. The beryllium industry will be predominantly affected by policy initiatives within the EU Green Deal and Circular Economy Package. Industry will need to conform to rising sustainability standards and develop new proposals to move towards sustainable energy solutions over fossil fuels.

Policy initiatives to watch:

- Circular economy package – circular electronics (non-legislative, Q4 2021)
- Circular economy package – Sustainable Products Initiative including a revision of the Ecodesign Directive (legislative, incl. impact assessment, Article 114 TFEU, Q4 2021)
- Updating the new industrial Strategy for Europe (non-legislative, Q2 2021)
- Follow-up on White Paper on Foreign Subsidies: i) leveling the playing field (legislative, incl. impact assessment, Article 207 TFEU, Q2 2021); ii) public procurement (legislative, incl. impact assessment, Article 207 TFEU, Q2 2021)
- Civil, defence and space industries – Action plan on synergies between civil, defence and space industries (non-legislative, Q1 2021)
- Design requirements and consumer rights for electronics – New design requirements and consumer rights for electronics (legislative, incl. impact assessment, Article 114 TFEU, Q4 2021)
- Fair Economy Package - Communication on a new occupational safety and health strategy framework (non-legislative, Q2 2021)
- Revision of Regulation (EC) No 1013/2006 on Shipments of Waste
- Revision of Directive 94/62/EC on Packaging and Packaging Waste Directive in order to reinforce the essential requirements for packaging to be placed on the EU market
- Revision of the Energy and Environmental Aid Guideline

DID YOU

KNOW?

Beryllium Usage in Automatic Braking Systems

Did you know? Beryllium has been benefiting drivers everywhere: today's trucks and cars include technologies and innovations with beryllium that make driving safer, more comfortable and fuel efficient.

Beryllium is currently being used as the connector material for battery and high-temperature applications. It is used in the form of copper beryllium (CuBe) - a high-performance alloy - for the powertrain. Copper beryllium alloy connectors are used throughout the electrical systems of cars and trucks for their reliability and to improve vehicle fuel efficiency. Copper beryllium components are found in traction controls, transmissions, electric motors, anti-lock braking and fuel injection systems. Further, copper beryllium electrical connectors are used in electrically assisted steering systems that are replacing older, heavier hydraulic and electromechanical systems.

Additionally, the lifesaving technology behind automotive airbags relies on beryllium alloys to work in a fraction of a second. Anti-lock brakes trust beryllium alloys to transmit electrical signals through terminal connections when seconds make a critical difference in preventing a collision. Electric relays made with beryllium alloys allow automotive emergency flashers to operate every time, even after continual cycles over the years of service.

Beryllium is also necessary for the recycling of light magnesium-containing alloys used in automobiles and trucks to reduce the weight and improve fuel efficiency. The addition of a few parts per million (ppm) of beryllium are used as an additive to prevent molten magnesium and its alloys from catching fire during the recycling stage. Without beryllium, production or recycling of these light metals would not be possible.

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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**.

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