2017Antimony day Resilience of the **Sb** value chain



The main takeaway is the need to generate and provide hard data so that i2a can effectively support the industry with the Evaluation of Sb substances and other related challenges the sector faces.



Sb substances are critical to many technology-enabling applications worldwide, and both the EU and the US highly depend on imports to access it. This pressure adds up to the **increasing regulatory requirements**, including risk assessment (EU-REACH and alike) and classification (CLP/GHS), every time new scientific evidence is published (e.g. 2016 NTP inhalation studies).

In the EU, ECHA aims to implement REACH and CLP processes in a way which enables data generation and collection before deciding on possible residual risks and the applicable measures. The evaluation and assessment process to become more efficient, by looking at groups of substances, and by progressively differentiating from the universe of chemicals, those of highest regulatory priority.

BAuA is evaluating the (recent) evidence available for Sb substances and giving Industry the opportunity to address identified knowledge gaps. Providing specific evidence about typical airborne exposure levels, releases from matrices, etc. related to the production and use of antimony substances, will decrease uncertainty and enable authorities to decide on more realistic risk management measures.

The main toxicological endpoint under discussion is lung toxicity (and the related carcinogenicity and specific target organ toxicity/STOT classifications). Embryotoxicity (related to the reproductive toxicity classification) is also under scrutiny.

The classification(s) applicable to the specific Sb substances will be determined on the basis of a careful interpretation of the toxicological evidence (versus the CLP/GHS rules) by experts from Industry and authorities.

The impact of a possible reclassification has not been objectively valued yet, but is expected to be significant.

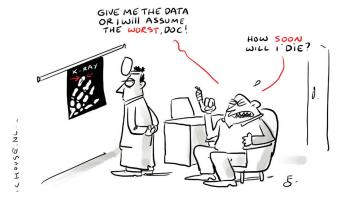




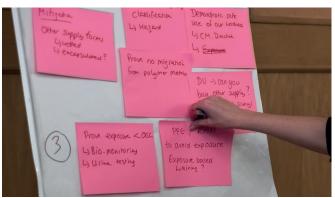




Classified substances may pose a risk if exposure is not limited or controlled. As part of the Evaluation process of Sb substances, authorities call for recent and specific evidence on the workplace exposure levels, particle sizes of Sb substances workers are potentially exposed to, and amounts of Sb possibly released from articles containing them. This information will enable the selection and implementation of the most efficient risk management options, such as workplace exposure monitoring and the set-up of the right OEL/TLV.



Many producers of Sb substances have already moved to supplying forms of Sb substances which do not produce dust, hence minimizing both exposure and risk. Downstream users who still use powder forms have implemented automated processes to handle Sb substances which minimize exposure for workers. In many downstream applications and products, Sb is furthermore encapsulated in a matrix. There is an **opportunity to make best practice known and spread**, together with a more systematic exposure and release data collection.



i2a is the most convenient platform to host the above discussions, as it can bring the whole value chain to a comparable level of awareness and involvement, while ensuring the necessary dialogue with authorities.

The 2017 Antimony Day was the first one of many future individual and collective exchanges between i2a and miners, producers, traders, and users of Sb substances, in order to ensure a sustainable and responsible Sb industry, where Sb substances continue to be the material of choice for many technology-enabling applications.