



EUROPEAN COMMISSION
DG Employment, Social Affairs and Inclusion
Employment
Health and Safety

The Advisory Committee on Safety and Health at Work

Opinion

**Opinion on an EU Occupational Exposure Limit value for
Beryllium and Inorganic Beryllium Compounds
under Directive 2004/37/EC (CMD).**

Doc. 662/17

Adopted on 31/05/2017

Beryllium and inorganic beryllium compounds (as classified under CLP as Category 1A or 1B carcinogen):

The three interests groups discussed beryllium during the June 2016, October 2016 and March 2017 meetings of the Working Party on Chemicals and agreed on the need for an EU Binding OEL for beryllium and inorganic beryllium compounds.

In the meeting of the Working Party of Chemicals on 21st March 2017, the recently adopted SCOEL Recommendation 175 (adopted 8th of February 2017) was discussed. SCOEL recommends the following occupational exposure limit values for beryllium and inorganic beryllium compounds:

8-hour TWA: 20ng/m³ beryllium (inhalable fraction)

15 min -STEL: 200ng/m³ beryllium (inhalable fraction)

BLV: None recommended

BGV: 0.04 µg beryllium/l urine (sampling time not critical)

Additional categorization: Carcinogenicity group C (genotoxic carcinogen with a mode-of action based threshold)

Notations: Sensitisation (dermal and respiratory), no skin notation

The values agreed by all three interest groups are;

An 8 hour TWA of 200 ng/m³ (inhalable fraction) with a value of 600ng/m³ (inhalable fraction) during a transitional period of 5 years.

The biological value of 0.04 µg beryllium/l urine recommended by SCOEL is agreed, and the ACSH suggests that the OEL in Annex III of the CMD should include a footnote to indicate the importance of biomonitoring for beryllium exposure risk management.

The notation for dermal and respiratory sensitisation recommended by SCOEL is also agreed.

The ACSH strongly recommends the Commission to adopt as soon as possible binding occupational exposure limit values for this substance under Directive 2004/37/EC.

Specific comments from the Employers Interest Group

The employers' representatives want to highlight that the agreed value of 200 ng/m³ is protective against chronic beryllium disease (CBD), which is the recognised adverse health effect of concern to be considered for establishing OEL for Beryllium. However, this value is not in line with available dose-response recent studies which identify a no-observed adverse effect level (NOAEL) at a higher level. In terms of technical feasibility, 200 ng/m³ is a very challenging target; industry refers to 600 ng/m³ in inhalable fraction (corresponding to the value recently adopted in USA of 200 ng/m³ in thoracic or total fraction, CFC sampling method) as the recommended exposure guideline in its voluntary product stewardship program to prevent the risk of CBD. Socio-economic impacts must be taken into account when adopting a BOEL. EIG requests that assessment conducted by RPA on the

technical and economic feasibility of the adoption of BOELs for Beryllium and its inorganic compounds should be fully taken into consideration.”

Specific comments from the Governmental Interest Group

No comments.

Specific comments from the Workers Interest Group

As the agreed value of 200 ng/m³ is not protective against Beryllium sensitisation (cf. SCOEL Recommendation 175, 2017), the BOEL should be reviewed in due time with a view to lowering it to the value of 20 ng/m³ (inhalable fraction) recommended by SCOEL (cf. Recommendation 175, adopted on February 8, 2017) to be protective against Beryllium sensitisation.