

UNEP Consultation - Call for Written Inputs on Issues of Concern: Priorities for further work and potential further international action

Topic n: BPA

1) *Do you agree with the assessment report that further international action is necessary? Please provide a brief explanation for your response.*

No.

Health organizations in the European Union, United States, Canada, Australia, and Japan, along with the World Health Organization (WHO), have all assessed the health hazards posed by BPA. Aside from the EU, the evaluations of most of these organizations indicate that foreseen exposure to BPA is currently deemed to fall below the threshold linked to health risks. Moreover, and as part of these evaluations, multiple regions, including the US, Canada, the European Union, Malaysia, and China have imposed specific risk management measures on the use of BPA in sensitive applications, such as those intended to be used by infants and children.

2) *What types of international actions should be taken? Please provide a brief explanation for your response.*

Legally binding

Soft law

Information sharing and awareness / Voluntary initiatives

No international actions are needed

Bisphenol A is a substance currently used mostly as a building block (monomer) to manufacture polymers, namely polycarbonate and epoxy resins. In polycarbonate, except for unavoidable traces of unreacted residual monomer, BPA is no longer present in its original chemical form. As such, and as per Question 1, we believe that a regionalized and risk-based approach to specific risk management is most appropriate with respect to Bisphenol A and its many and varied uses.

3) *Which type of approach or measure would you see as appropriate to address BPA at the international level? Please explain your response, including examples if possible.*

Legally binding

Options / guidance for economic instruments

Voluntary measures and approaches: (such as Guidelines, principles and strategies)

Measures supporting science-based knowledge and research:

International alignment on scientific guidelines for sound and robust hazard assessments would be needed. The risk assessment should be strictly evidence-based in order to inform regulators in developing effective measures. Currently, most regions in the world have concluded that the

use of Bisphenol A is acceptable for its intended applications, including for food packaging, however differences in methodologies and outcomes have occurred, highlighting the need for better international alignment on assessment guidelines.

Other:

4) What factors prevent action/progress on addressing BPA in your country?

Lack of technical capacity

Lack of scientific knowledge

Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors.

Difficulty with resource mobilization

Lack of economically feasible green and sustainable alternatives

Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?

None, there are no factors preventing action or progress.

Bisphenol A is already widely regulated across multiple regions of the globe. In Europe, Bisphenol A is extensively regulated via both general chemical control legislation and application specific legislation. This has seen the European Union adopt multiple control measures related to BPA, including establishing safety thresholds and restricting certain uses of BPA on both human health and environmental grounds. In these applications, greater than 90% of the BPA is used as a building block to make polymers such as polycarbonate and epoxy resins. In these polymers, BPA is no longer present in its original chemical form except for unavoidable traces. The use of BPA as intermediate in the production of polymers contributes only minimally to BPA emissions.

5) *Can you point to existing initiatives that could be replicated or scaled up at the international level? Please share a weblink to the suggestion(s) if available.*

6) *Which sectors/value chains need to be closely involved in developing solutions? Please visit the two-page factsheet on [Bisphenol A](#) for more information on the topic. If you select "Other", please elaborate your response.*

Agriculture and food production

Construction

Electronics

Energy

Health

Labour

Pharmaceuticals

Public, private or blended finance

Retail

Textiles

Transportation

Waste

Other: **Chemicals & Plastics Industry**

Because of its unique combination of properties, such as transparency, durability, versatility, heat and shatter-resistance, polycarbonate is selected for applications where no alternative polymers are suitable, such as safety glazing, spectacle lenses, or medical equipment. Polycarbonate is furthermore employed in applications essential to achieve the sustainable transition: for example, battery casings for electrical vehicles and LED lighting. Therefore, those value chains should be involved when developing proposals on BPA. As mentioned before, since more than 90% of BPA is used as an intermediate to produce polycarbonate and epoxy resins, it is important to also include the chemical industry and polymer producers in the development of proposals on BPA.

7) *Which international forum or instrument would be best placed to take the lead on international action on BPA? Please provide specific examples of e.g., Intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments...*

As per our response to Question 1, we do not believe that international action on BPA is necessary. Moreover, we do not believe that BPA falls within the scope of existing chemical management conventions, owing to its intrinsic properties and that of polycarbonate.

7a) *Which international agendas have important linkages with Bisphenol A? For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#).*

Agriculture and Food

Biodiversity

Climate Change

Health

Human Rights

Sustainable Consumption and Production

World of Work

Other:

7b) Please elaborate on the important linkages with BPA, including examples if possible. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)

Climate change. Bisphenol A is mainly used to make polycarbonate and epoxy resins. These materials are used in various durable applications that contribute to sustainable consumption and reduction of greenhouse gas emissions. Polycarbonate is for instance widely used in cars due to its low weight and impact resistance in applications such as battery casings, and furthermore in

LED lighting due to its high optical properties. By reducing overall weight of the vehicle whilst maintaining performance and safety, polycarbonate contributes significantly to the transition to emission-free e-mobility.

Health. Polycarbonate is used in many life-saving medical applications, e.g., housing the blood filtration system (hemodialysis) essential for treating organ failure patients. polycarbonate's high transparency is critical for visual confirmation of proper functioning of the dialysis station. Another example is structural elements of auto-injectors. Polycarbonate's exceptional resistance to chemical and heat cleaning/sterilization, robustness, and durability makes recovery and reuse of polycarbonate in medical applications practicable.

8) *What priority level do you attach to BPA for international action?*

Very high

High

Medium

Low

Very low

9) *Is there any priority further work you would like to suggest at the national level? Please share a weblink to the suggestion(s) if available.*

10) *Is there any priority further work you would like to suggest at the regional level? Please share a weblink to the suggestion(s) if available.*

Please consider the mentioned weblinks

<http://doi.org/10.1002/ieam.4805>

<http://doi.org/10.1002/ieam.4804>