

ANNEX XV REPORT

AN ASSESSMENT OF WHETHER THE USE OF HBCDD IN ARTICLES SHOULD BE RESTRICTED IN ACCORDANCE WITH ARTICLE 69(2) OF REACH

SUBSTANCE NAME(S): Hexabromocyclododecane (HBCDD), alpha-hexabromocyclododecane, beta-hexabromocyclododecane, gamma-hexabromocyclododecane, 1,2,5,6,9,10-hexabromocyclododecane

IUPAC NAME: Hexabromocyclododecane

EC NUMBERS: 247-148-4, 221-695-9

CAS NUMBERS: 25637-99-4, 134237-50-6, 134237-51-7, 134237-52-8, 3194-55-6

DATE: 13 October 2016

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A. Conclusions

A.1 Summary and Conclusions based on the assessment

Hexabromocyclododecane (HBCDD) is classified in Regulation (EC) No 1272/2008 (CLP) as a reprotoxic (category 2), it has been identified as a persistent, bioaccumulative and toxic (PBT) substance and included on the candidate list (2008/10/28; ED/67/2008). It has been listed in the Annex A of the Stockholm Convention on Persistent Organic Pollutants (POPs) in 2013, and included in the Annex XIV to REACH (Commission Regulation (EU) No 143/2011) with a sunset date of 21 August 2015.

HBCDD has been registered in the tonnage band 10 000 – 100 000 tonnes per annum with several uses in articles indicated. 35 substances in articles (SiA) notifications were made under Article 7(2) of REACH, and there has been one application for authorisation (AFA) made for the substance.

Following an assessment of the existing and planned legal requirements, notably the scheduled implementation of the Stockholm Convention under the EU POP Regulation (Regulation (EC) No 850/2004), ECHA considers that a restriction under article 69(2) of REACH is not warranted. Placing on the market and use of HBCDD in articles is planned to be prohibited under the EU POP Regulation.

In conclusion, ECHA considers that a restriction under Article 69(2) of REACH is not warranted. Therefore, ECHA did not carry out a call for evidence in this particular case.

A.2 Targeting

The report is targeted on the use of HBCDD in articles and whether or not such use should be restricted.

This targeting is based on the requirement of Article 69(2) of the REACH regulation that requires ECHA to consider if the use of the substance in articles is adequately controlled and prepare an Annex XV dossier for an appropriate restriction if this is not the case.

A.3 Summary of the justification

A.3.1 Identified hazard and risk

Information on uses

Current use of HBCDD in the EU is limited to the uses within the scope of the application for authorisation, which amount to 8 000 tonnes per year. The uses applied for are the following:

- Formulation of flame retarded expanded polystyrene (EPS) to solid unexpanded pellets using hexabromocyclododecane as the flame retardant additive (for onward use in building applications),

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- Production of flame retarded expanded polystyrene (EPS) articles for use in building applications.

HBCDD has been registered in the total tonnage band of 10 000 – 100 000 tonnes per year by 8 registrants. The only types of articles that can be currently produced in the EU are associated to the authorised uses (EPS articles for use in building applications). Import of all types of articles containing HBCDD is currently not restricted. Some limited information from the notifications under article 7(2) of REACH indicates some imports of articles. ECHA has received 35 notifications from both producers and importers of articles. HBCDD has been imported particularly in packaging materials, textiles and electrical/electronic equipment (IOM 2008, as cited in ECHA Recommendation, 2009). ECHA has not been able to get information on total quantities imported in articles.

Information on hazards

HBCDD is classified in Annex VI of CLP as: Repr. 2 H361; Lact. H362. HBCDD is candidate listed and included on Annex XIV to REACH for its PBT properties.

Information on emissions/release

Not relevant for this report as no restriction is proposed.

Characterisation of risk

Not relevant for this report as no restriction is proposed.

A.3.2 Justification that action is required on a Union-wide basis

Given the implementation of the restriction of HBCDD under the POP Regulation there is action taken place on a Union-wide basis.

A.3.3 Justification that the proposed restriction is the most appropriate Union-wide measure

Given the implementation of the restriction of HBCDD under the POP Regulation a restriction would not be the most appropriate measure.

B. Information on hazard and risk

B.1 Identity of the substance(s) and physical and chemical properties¹

B.1.1 Name and other identifiers of the substance(s)

Chemical name: Hexabromocyclododecane and 1,2,5,6,9,10-hexabromocyclododecane

EC Number: 247-148-4; this number refers to hexabromocyclododecane (without specifying the bromine positions) and is used by some industry for the commercial substance.

221-695-9^a; this number refers to 1,2,5,6,9,10-hexabromocyclododecane and is thus the most correct one from a chemical point of view.

CAS Number: 25637-99-4^b; this number refers to hexabromocyclododecane (without specifying the bromine positions) and is used by some industry for the commercial substance.

3194-55-6^a; this number refers to 1,2,5,6,9,10-hexabromocyclododecane and is thus the most correct one from a chemical point of view.

IUPAC Name: Hexabromocyclododecane

^a: The latter number is more specific in terms of the diastereomeric composition of the substance (1,2,5,6,9,10-HBCDD; see below). However, as the former number is used by industry (e.g., in SDS) for technical HBCDD, the report needs to cover both numbers.

^b: This number refers to unspecific isomer composition.

B.1.2 Composition of the substance(s)

Chemical name: Hexabromocyclododecane and 1,2,5,6,9,10-hexabromocyclododecane

EC Number: 247-148-4; 221-695-9

CAS Number: 25637-99-4 ; 3194-55-6

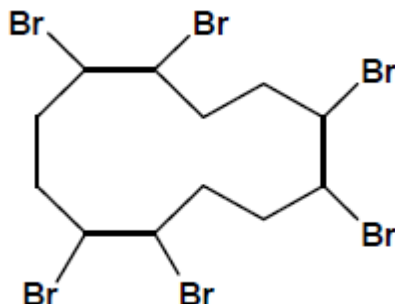
¹ Member State Committee support document (SVHC SD, 2008).

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IUPAC Name: Hexabromocyclododecane

Molecular Formula: $C_{12}H_{18}Br_6$

Structural Formula:



Molecular Weight: 641.7

Synonyms: Cyclododecane, hexabromo; HBCD; Bromkal 73-6CD; Nikkafainon CG 1; Pyroguard F 800; Pyroguard SR 103; Pyroguard SR 103A; Pyrovatex 3887; Great Lakes CD-75P™; Great Lakes CD-75; Great Lakes CD75XF; Great Lakes CD75PC (compacted); (Dead Sea Bromine Group Ground FR 1206 ILM; Dead Sea Bromine Group Standard FR 1206 I-LM; Dead Sea Bromine Group Compacted FR 1206 I-CM)²; FR-1206; HBCD ILM; HBCD IHM

Concentration range (% w/w):

Depending on the producer, technical grade HBCDD consists of approximately 70-95 % γ -HBCDD and 3-30 % of α - and β -HBCDD due to its production method (European Commission, 2007). Two additional diastereoisomers, δ -HBCDD and ϵ -HBCDD have been found by Heeb et al. (2005) in commercial HBCDD in concentration of 0.5 % and 0.3 %, respectively. The only detailed information on composition available in the EU RAR (European Commission, 2007), concerns composites used for most testing purposes. The composites were prepared by mixing equal amounts of technical HBCDD obtained from the three manufacturers being on the EU market, generally giving composite compositions of approximately 80 % γ -HBCDD, 5-10 % of α -HBCDD, 5-10 % of β -HBCDD. The amount of contaminants/unknown constituents varies (0-5 %) and one identified constituent is tetrabromocyclododecane. The

² Historical names of the products of ICL-IP. Current names of ICL-IP products are: FR-1206, HBCD ILM and HBCD IHM.

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composition is likely to differ between products from the different manufacturers, but also to differ between different products of a single manufacturer (e.g., HBCD-ILM (highmelting) and HBCD-IHM (low-melting)).

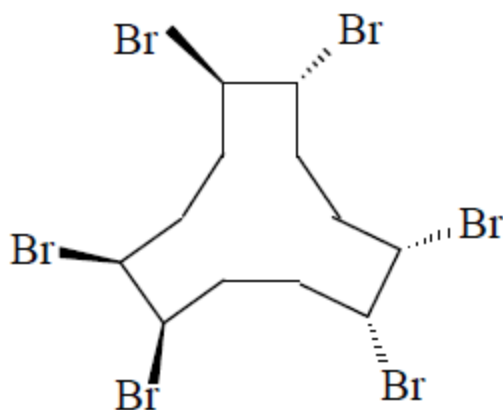
Additional information on the three main constituents of technical hexabromocyclododecane

CAS Number: Technical HBCDD (CAS No 25637-99-4) is made up of three main chiral diastereomers.

Each of these has a specific CAS No, namely:

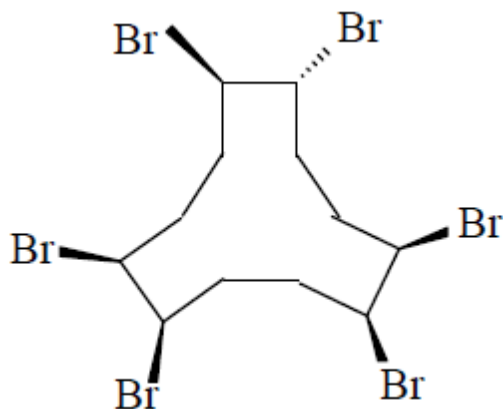
- (1R,2R,5S,6R,9R,10S)-rel-1,2,5,6,9,10-hexabromocyclododecane
[alpha-hexabromocyclododecane; CAS No 134237-50-6]
- (1R,2R,5R,6S,9R,10S)-rel-1,2,5,6,9,10-hexabromocyclododecane
[beta-hexabromocyclododecane; CAS No 134237-51-7].
- (1R,2R,5R,6S,9S,10R)-rel-1,2,5,6,9,10-hexabromocyclododecane
[gamma-hexabromocyclododecane.; CAS No 134237-52-8]

Structural Formula:



alpha-HBCDD (CAS No: 134237-50-6)

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beta-HBCDD (CAS No: 134237-51-7)

B.1.3 Physicochemical properties

Table 1: Summary of physico-chemical properties

<i>REACH ref Annex</i>	<i>Property</i>	<i>Value</i>
VII, 7.1	Physical state at 20° C and 101.3 kPa	White odourless solid
VII, 7.2	Melting / freezing point	Ranges from approximately: 172-184 °C to 201-205 °C 190 °C , as an average value, was used as input data in the EU risk assessment
		179-181 °C α-HBCDD 170-172 °C β-HBCDD 207-209 °C γ-HBCDD
VII, 7.3	Boiling point	Decomposes at >190 °C
VII, 7.5	Vapour pressure	6.3.10 ⁻⁵ Pa (21 °C)
VII, 7.7	Water solubility	See Table 2
VII, 7.8	Partition coefficient noctanol/water (log value)	5.625 (technical product) 5.07 ± 0.09 α-HBCDD 5.12 ± 0.09, β-HBCDD

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		5.47 ± 0.10 γ-HBCDD
	Dissociation constant	-

Source : SVHC SD, 2008

Table 2: Summary of the results of valid water solubility studies using generator column method

Test substance		Water solubility (µg l ⁻¹)
α -HBCDD	Water	48.8±1.9
β -HBCDD		14.7±0.5
γ -HBCDD		2.1±0.2
HBCDD technical product, sum of above		65.6
α -HBCDD		Salt-water medium
β -HBCDD	10.2	
γ -HBCDD	1.76	
HBCDD technical product, sum of above	46.3	
γ -HBCDD	Water	3.4±2.3

Source : SVHC SD, 2008

B.1.4 Justification for grouping

The Annex XIV entry for HBCDD is a relatively broad entry, which might be considered to describe UVCB substances (with undefined Br positions), as well as multi-constituent substances (containing more than one defined diastereoisomers at concentrations between ≥10% and <80%), and mono-constituent substances (one diastereoisomer ≥80%) (ECHA Q&A, 2015).

B.2 Manufacture and uses

B.2.1 Manufacture, import and export of a substance

At the time of the recommendation for inclusion in the Annex XIV to REACH there was one production site in the EU, in the Netherlands. The manufacturing volume was around 6000 tonnes per year in 2009, with an additional 6 000 tonnes per year imported (ECHA Recommendation, 2009). It is unclear if manufacturing continues today for authorised uses, uses exempted from authorisation or for export.

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HBCDD has been registered in the total tonnage band³ of 10 000 – 100 000 tonnes per year by 8 registrants⁴.

B.2.2 Uses

Current use of HBCDD in the EU is limited to the uses within the scope of the authorisation granted by the European Commission, which amount to a maximum of 8 000 tonnes per year (ECHA opinion/use 1, 2015 and ECHA opinion/use 2, 2015). The uses applied for are the following:

- Use 1: Formulation of flame retarded expanded polystyrene (EPS) to solid unexpanded pellets using hexabromocyclododecane as the flame retardant additive (for onward use in building applications);
- Use 2: production of flame retarded expanded polystyrene (EPS) articles for use in building applications.

All other uses of HBCDD are consequently not allowed in the EU, except from uses exempted from authorisation or not in the scope of authorisation. It should be noted that only the companies covered by the authorisation are allowed to use HBCDD under the conditions set in the authorisation decision.

Recycling of EPS scrap containing HBCDD can also occur⁸. However, ECHA has no information on the quantities involved. It is also unclear if recycling would lead to new flame retarded products that can be used in the same technical applications (e.g. for use 2 above), or completely different applications (ECHA opinion/use 2, 2015, ECHA recommendation, 2009).

ECHA has received information on the following article categories the registrations: electrical batteries and accumulators, fabrics, textiles and apparel, plastic articles and rubber articles⁵.

ECHA has also received 35 notifications under article 7(2) of REACH (substance in article notifications), corresponding to less than 1000 tonnes of HBCDD in articles⁵. The vast majority of notifiers are producers of articles or downstream users, with only few notifications coming from importers of articles. Most of the tonnage reported seems to fall under the uses applied for authorisation with some limited tonnage reported for use in XPS articles and EEE applications. ECHA received most of the

³ The Total Tonnage Band is compiled from all the dossiers with two exceptions; any tonnages claimed confidential and any quantity used as an intermediate to produce a different chemical. The Total Tonnage band published does not necessarily reflect the registered tonnage band(s) (<http://echa.europa.eu/information-on-chemicals/registered-substances>).

⁴ Registered substances, ECHA's website (checked on 01/10/2015).

⁵ Data on Candidate List substances in articles, the data is based on notifications and registrations received before 27 February 2015, <http://echa.europa.eu/documents/10162/02861a44-bbbc-4756-9e11-e61105119d86>. No additional notifications for HBCDD were received after that date (checked on 28/10/2015).

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notifications on HBCDD in May 2011, with some additional arriving in May 2013. As such, they might not reflect the current market situation⁶.

Some further details on the applications of HBCDD were given in the recommendation background document for inclusion of HBCDD in Annex XIV to REACH (ECHA Recommendation, 2009): HBCDD was reported to be used in EPS in automobile cushions for children. Minor uses of EPS are packaging material and props for exhibitions, films or similar. Extruded Polystyrene (XPS) is mainly used as a thermal insulation in buildings (residential, industrial and agricultural), civil engineering applications, cold stores and vehicles. In high impact polystyrene (HIPS), HBCDD is used mainly for video and stereo equipment, distribution boxes for electrical lines in the construction sector and refrigerator lining. Micronised⁷ HBCDD is used in textile applications to comply with flame retardant standards, mainly for upholstered furniture and seating in transportation, draperies, bed mattress ticking, interior and automobile textiles. The amounts allocated to the different groups of uses at the time of the recommendation for inclusion to the Annex XIV to REACH is shown on Table 3. It is evident that most of the tonnage was used for EPS and XPS applications with relatively low tonnages used in HIPS and textiles. However these amounts do not contain any information on imported articles.

All the uses mentioned above (apart from those for which authorisation has been granted and any use in recycling of waste⁸) are not authorised anymore in the EU. However, most of the uses listed above relate to the production of articles, which can be imported in the EU since they are outside the scope of authorisation.

Table 3: Uses of HBCDD in the EU in 2006/2007

	Tonnes HBCDD /year	Number of Sites
Expanded Polystyrene	5 300	21
Extruded Polystyrene	5 900	28
High Impact Polystyrene	200	3
Textile coating	200	16
Total	11,600	47

Source: ECHA Recommendation (2009)

⁶ There is no obligation to update a notification under the REACH regulation.

⁷ The HBCDD particles in some applications (e.g. for use in textile back-coating) need to be very small. Therefore some quantities of HBCDD are micronised in a grinding process (ECHA/IOM, 2008).

⁸ If falling under the waste legislation and therefore excluded from REACH authorisation requirements

B.2.3 Uses advised against by the registrants

No uses are advised against⁴.

B.2.4 Description of targeting

Targeting is based on the hazard for which the substance was included on Annex XIV to REACH, and the use of the substance in articles.

B.3 Classification and labelling

Classification and labelling according to CLP

HBCDD has the following harmonised classification according to the Annex VI of Regulation (EC) No 1272/2008 (CLP Regulation):

- Repr. 2 - H361: suspected of damaging fertility or the unborn child.
- Lact. - H362: may cause harm to breast-fed children.

Labelling: GHS08, Wng, H361, H362

Classification according to the Classification and Labelling Inventory⁹

There have been 207 notifications to the C&L inventory, some of them indicating the following additional endpoints:

- Aquatic Chronic 1 – H410: Very toxic to aquatic life with long lasting effects.
- Aquatic Acute 1 – H400: Very toxic to aquatic life.

B.4 Environmental fate properties

See SVHC SD (2008).

B.5 Human health hazard assessment

See SVHC SD (2008).

B.6 Human health hazard assessment of physicochemical properties

Not relevant.

B.7 Environmental hazard assessment

See SVHC SD (2008).

⁹ As reported on the C&L inventory (checked on 29/09/2015): <http://echa.europa.eu/information-on-chemicals/cl-inventory-database> .

B.8 PBT and vPvB assessment

B.8.1 Assessment of PBT/vPvB Properties – Comparison with the Criteria of Annex XIII

See SVHC SD (2008).

B.8.2 Emission Characterisation

Not relevant for this report as no restriction is proposed¹⁰.

B.9 Exposure assessment

B.9.1 General discussion on releases and exposure

Not relevant for this report as no restriction is proposed¹¹.

B.9.1.1 Summary of the existing legal requirements

Regulation (EC) No 1907/2006 (REACH)

HBCDD was identified as an SVHC and included in the Candidate List for Authorisation in October 2008. For substances of the Candidate List present in articles, communication obligations along the supply chain (article 33 of the REACH regulation) and notification to ECHA (article 7 of the REACH regulation) apply. HBCDD was subsequently included in the Authorisation List (Annex XIV to REACH) with latest application date of 21 February 2014 and sunset date 21 August 2015 (Commission Regulation (EU) No 143/2011). One application for authorisation was submitted on 13 February 2014 for two uses (see section B.2.2). On 8 January 2016 the Commission granted a two years review period to the applicants ending on 21 August 2017. The authorisation had several conditions (COM/AfA (2016)).

The authorisation can be withdrawn when the replacement of HBCDD has been successfully implemented. If no review report is submitted by the applicants within the applicable deadline (21 February 2016), the authorisation will cease to be valid at the end of the review period.

¹⁰ The opinions of RAC and SEAC on the applications for authorisation received for HBCDD contain updated information of releases for the uses applied for (ECHA opinion use 1 and use 2, 2015). The recommendation Background Document for HBCDD also contains some information (ECHA Recommendation, 2009). Further emissions might occur from imported articles (e.g. HIPS, textiles), for which no tonnage information is available.

¹¹ An environmental exposure assessment was submitted for the uses applied for authorisation:

use 1: <http://echa.europa.eu/documents/10162/ab191f7e-a290-4d75-b253-da14ce3dd076>

use 2: <http://echa.europa.eu/documents/10162/7959599c-20e2-4d13-a1df-94fcdd23434e>

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Commission Recommendation of 3 March 2014 on the monitoring of traces of brominated flame retardants in food (2014/118/EU): according to the recommendation Member States should perform monitoring of brominated flame retardants in food, during the years 2014 and 2015. For HBCDD, the following food commodities are mentioned: fish and other seafood, meat and meat products, milk and dairy products, eggs and egg products, as well as infant and follow-up formula.

Stockholm Convention on Persistent Organic Pollutants: HBCDD is listed in Annex A (Elimination) of the Stockholm Convention on POPs (Stockholm Convention, 2013). A specific exemption is included for the production and use of HBCDD in EPS and XPS in buildings (Table 4). The specific exemptions expire five years after entry into force, unless an extension is granted or an earlier date is indicated (Article 4.4 of the Stockholm Convention, 2009).

Table 4: Listing of HBCDD in the Stockholm Convention

Chemical	Activity	Specific exemption
Hexabromocyclododecane	Production	As allowed for the parties listed in the Register in accordance with the provisions of Part VII of this Annex*
	Use	Expanded polystyrene and extruded polystyrene in buildings in accordance with the provisions of Part VII of this Annex*

Source: Stockholm Convention (2013)

* Part VII, Hexabromocyclododecane: Each Party that has registered for the exemption pursuant to Article 4 for the production and use of hexabromocyclododecane for expanded polystyrene and extruded polystyrene in buildings shall take necessary measures to ensure that expanded polystyrene and extruded polystyrene containing hexabromocyclododecane can be easily identified by labelling or other means throughout its life cycle.

Regulation (EC) 850/2004 (POP Regulation)

The POP regulation implements the commitments of the EU under the Stockholm Convention on POPs. An amendment to the Annex A of the Stockholm Convention is normally implemented by modifying the Annex I to the POP Regulation. However, in addition to being a POP (listed in the Annex A of the Stockholm Convention), HBCDD is also listed in the Annex XIV to the REACH Regulation. For that reason, the Commission notified the depositary of the Stockholm Convention (in November 2014 and in August 2015) that the EU could not accept the amendment of the Annex A to the Stockholm Convention (*opt out*). Now that the sunset date has passed and there is a clear picture on the applications for authorisation received and the uses that are bound to be authorised the Annex I to the POP regulations can be amended. In the proposal for amendment a clear link is made with the authorisation process under REACH.

In the draft text, a specific exemption related to the authorisation requirement is included, to align the authorised uses under REACH with the exemption foreseen in

the Stockholm Convention. It is stated that the use of HBCDD will be allowed provided that it is authorised in accordance with Title VII of the REACH Regulation. This exemption will expire on 26 November 2019, which is five years after the entry into force of the Stockholm Convention with respect to HBCDD (the exemption can expire earlier if the review period expires or the authorisation is withdrawn). Placing on the market of EPS articles produced in accordance with this exemption will be allowed 6 months after the expiry of the exemption (POP regulation draft, 2015).

B.9.1.2 Other initiatives

Directive 2011/65/EU (RoHS): HBCDD was considered as a priority substance and was a candidate for inclusion in the Annex II of the RoHS Directive. However, HBCDD was included in the Annex A of the Stockholm Convention. In addition, no application for authorisation was received for uses in EEE under REACH. For these reasons the Commission decided not to restrict HBCDD under the RoHS Directive (COM/RoHS, 2015).

Voluntary Emissions Control Action Programme (VECAP): VECAP is a voluntary initiative established in 2004 run by BSEF. The aim of the programme is to reduce potential emissions of flame retardants to the environment through the promotion of manufacturing best practice. HBCDD is among the chemicals for which a yearly assessment of potential emissions is undertaken. According to VECAP (2014), *"HBCDD is expected to be phased out in Europe in the near future, EFRA members are committed to implement VECAP while sales continue."*

US EPA significant new use rule (SNUR): This rule requires persons who intend to manufacture (including import) or process HBCDD for use in consumer textiles (other than for use in motor vehicles) to notify EPA. According to the US EPA, the only current use of HBCDD for consumer textiles is in motor vehicles (US EPA, 2015). To note that the US has not ratified the amendment to the Stockholm Convention related to HBCDD.

B.9.1.3 Discussion on existing legal requirements and conclusions on the need to initiated a restriction process under Article 69(2) of REACH

A combination of legal provisions related to HBCDD currently apply (authorisation requirement under REACH) or are in the process of being applied (implementation of the Stockholm Convention under the EU POP regulation). These instruments are designed to effectively work in a coordinated manner: the EU POP Regulation takes due account of the provisions and milestones of REACH related to authorisation (sunset date, review period etc.).

Two uses of HBCDD have been authorised in the EU. Consequently, articles containing HBCDD can continue to be produced in the EU and placed on the market for applications in the building sector. The applicants have informed that they do not intend to prepare a review report (i.e. apply for a prolongation of the authorisation) because they plan to use an alternative.

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Import of articles containing HBCDD is currently allowed. However, when the amendment to the EU POP Regulation will be implemented, all articles containing HBCDD will be prohibited from being placed on the market unless they abide by the specific exemptions listed (articles used in the building sector for a period until 6 months from the expiry of the exemption related to authorised uses, or any articles respecting the 0.01 % w/w limit for unintentional trace contaminants). Finally, it is specified in the draft EU POP Regulation that the exemption related to the authorisation requirement will be allowed until 26 November 2019 (or earlier if the review period expires or the authorisation is withdrawn). Consequently, all uses of HBCDD in articles, including the currently authorised uses will be prohibited by the EU POP Regulation. In such circumstances it is unwarranted to propose a restriction of the same articles under article 69(2) of REACH.

In conclusion, a restriction under Article 69(2) of REACH is not warranted because articles containing HBCDD are planned to be prohibited under other Union legislation. The implementation of these prohibitions is bound to occur earlier than a restriction initiated under Article 69(2) of REACH.

Information gathered on the presence of HBCDD in imported articles does not change the conclusions. Therefore ECHA did not carry out a call for evidence in this particular case.

B.10 Risk characterisation

Not relevant for this report as no restriction is proposed.

B.11 Summary on hazard and risk

Not relevant for this report as no restriction is proposed.

C. Available information on alternatives

Not relevant. The applications for authorisation on HBCDD (Ineos et al., 2015) give details.

D. Justification for action on a Union-wide basis

No restriction is proposed as all the uses of HBCDD in articles will be eventually prohibited by another legal instrument (the EU POP Regulation). ECHA concludes that there are no grounds to prepare a restriction dossier that would conform to the requirements of Annex XV of the REACH Regulation.

E. Justification why the proposed restriction is the most appropriate Union-wide measure

Not applicable for the report.

F. Socio-economic Assessment of Proposed Restriction

Not applicable for the report.

G. Stakeholder consultation

Not applicable for the report.

H. Other information

Not relevant.

References

- COM (2011) COMMISSION REGULATION (EU) No 143/2011 of 17 February 2011 amending Annex XIV to Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals ('REACH'), available at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32011R0143&from=EN>
- COM/AfA (2016) Commission implementing decision of 8.1.2016 granting an authorisation for uses of hexabromocyclododecane (HBCDD) under Regulation (EC) No 1907/2006 of the European Parliament and of the Council (C(2015) 9812 final) <http://ec.europa.eu/DocsRoom/documents/14945>
- COM/RoHS (2015) COMMISSION DELEGATED DIRECTIVE .../.../EU, of 31.3.2015, amending Annex II to Directive 2011/65/EU of the European Parliament and of the, Council as regards the list of restricted substances, C(2015) 2067 final, available at <http://ec.europa.eu/transparency/regdoc/rep/3/2015/EN/3-2015-2067-EN-F1-1.PDF>
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