

## **ANNEX XVII TO REACH – Conditions of restriction**

Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Entry 50	
Polycyclic-aromatic hydrocarbons (PAH)	
(a) Benzo[a]pyrene (BaP)	
CAS No 50-32-8	
(b) Benzo[e]pyrene (BeP)	
CAS No 192-97-2	
(c) Benzo[a]anthracene (BaA)	
CAS No 56-55-3	
(d) Chrysen (CHR)	
CAS No 218-01-9	
(e) Benzo[b]fluoranthene (BbFA)	
CAS No 205-99-2	
(f) Benzo[j]fluoranthene (BjFA)	
CAS No 205-82-3	
(g) Benzo[k]fluoranthene (BkFA)	
CAS No 207-08-9	
(h) Dibenzo[a,h]anthracene (DBAhA)	
CAS No 53-70-3	

Conditions of restriction	Latest amendments to the Conditions of
	restriction
	(Regulation number (EU) 2021/1199 of 20 July 2021)
1. From 1 January 2010, extender oils	9. Granules or mulches shall not be placed on
shall not be placed on the market, or used	the market for use as infill material in synthetic
	turf pitches or in loose form on playgrounds or
	in sport applications if they contain more than

for the production of tyres or parts of tyres if they contain:

- more than 1 mg/kg (0,0001 % by weight) BaP, or,
- more than 10 mg/kg (0,001 % by weight) of the sum of all listed PAHs.

The standard EN 16143:2013 (Petroleum products — Determination of content of Benzo(a)pyrene (BaP) and selected polycyclic aromatic hydrocarbons (PAH) in extender oils — Procedure using double LC cleaning and GC/MS analysis) shall be used as the test method for demonstrating conformity with the limits referred to in the first subparagraph.

Until 23 September 2016, the limits referred to in the first subparagraph may be regarded as kept, if the polycyclic aromatics (PCA) extract is less than 3 % by weight as measured by the Institute of Petroleum standard IP 346:1998 (Determination of PCA in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method), provided that compliance with the limits of BaP and of the listed PAHs, as well as the correlation of the measured values with the PCA extract, is measured by the manufacturer or importer every six months or after each major operational change, whichever is earlier.

2. Furthermore, tyres and treads for retreading manufactured after 1 January 2010 shall not be placed on the market if they contain extender oils exceeding the limits indicated in paragraph 1.

These limits shall be regarded as kept, if the vulcanised rubber compounds do not exceed the limit of 0,35 % Bay protons as measured and calculated by ISO 21461 (Rubber vulcanised — Determination of

- 20 mg/kg (0,002 % by weight) of the sum of all listed PAHs.
- 10. Granules or mulches shall not be used as infill material in synthetic turf pitches or in loose form on playgrounds or in sport applications if they contain more than 20 mg/kg (0,002 % by weight) of the sum of all listed PAHs.
- 11. Granules or mulches placed on the market for use as infill material in synthetic turf pitches or in loose form on playgrounds or in sport applications shall be marked with a unique identification number of the batch.
- 12. Paragraphs 9 to 11 shall apply from 10 August 2022.
- 13. Granules or mulches that are in use in the Union on 9 August 2022 as infill material in synthetic turf pitches or in loose form on playgrounds or in sport applications may remain in place and continue to be used there for the same purpose.
- 14. For the purposes of paragraphs 9 to 13:
  - (a) "granules" are mixtures that appear as solid particles in the size range from 1 to 4 mm, which are made from rubber or other vulcanised or polymeric material of recycled or virgin origin, or obtained from a natural source;
  - (b) "mulches" are mixtures that appear as flake-shaped solid particles in the size range from 4 to 130 mm length and 10 to 15 mm width, which are made from rubber or other vulcanised or polymeric material of recycled or virgin origin, or obtained from a natural source;
  - (c) "infill material in synthetic turf pitches" consists of granules used in synthetic turf pitches to improve the sport technical performance characteristics of the turf system;
  - (d) "use in loose form on playgrounds or in sport applications" is any use of granules or mulches in loose form on playgrounds or for sport purposes other

aromaticity of oil in vulcanised rubber compounds).

- 3. By way of derogation, paragraph 2 shall not apply to retreaded tyres if their tread does not contain extender oils exceeding the limits referred to in paragraph 1.
- 4. For the purpose of this entry 'tyres' shall mean tyres for vehicles covered by:
  - Directive 2007/46/EC of the European Parliament and of the Council of 5 September 2007 establishing a framework for the approval of motor vehicles and their trailers (\*),
  - Directive 2003/37/EC of the European Parliament and of the Council of 26 May 2003 on type-approval of agricultural or forestry tractors, their trailers and interchangeable towed machinery, together with their systems, components and separate technical units (\*\*), and
  - Directive 2002/24/EC of the European Parliament and of the Council of 18 March 2002 relating to the type-approval of two or three-wheel motor vehicles and repealing Council Directive 92/61/EEC (\*\*\*).
- 5. Articles shall not be placed on the market for supply to the general public, if any of their rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity, under normal or reasonably foreseeable conditions of use, contain more than 1 mg/kg (0,0001 % by weight of this component) of any of the listed PAHs.

Such articles include amongst others:

than as infill material in synthetic turf pitches.

- sport equipment such as bicycles, golf clubs, racquets
- household utensils, trolleys, walking frames
- tools for domestic use
- clothing, footwear, gloves and sportswear
- watch-straps, wrist-bands, masks, head-bands
- 6. Toys, including activity toys, and childcare articles, shall not be placed on the market, if any of their rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity, under normal or reasonably foreseeable conditions of use, contain more than 0,5 mg/kg (0,00005 % by weight of this component) of any of the listed PAHs.
- 7. By way of derogation from paragraphs 5 and 6, these paragraphs shall not apply to articles placed on the market for the first time before 27 December 2015.
- 8. By 27 December 2017, the Commission shall review the limit values in paragraphs 5 and 6 in the light of new scientific information, including migration of PAHs from the articles referred to therein, and information on alternative raw materials and, if appropriate, modify these paragraphs accordingly.

(\*) OJ L 263, 9.10.2007, p. 1.

(\*\*) OJ L 171, 9.7.2003, p. 1.

(\*\*\*) OJ L 124, 9.5.2002, p. 1.