UL Solutions

Toy industry regulatory updates: What’s next?

LET’S GO

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From new harmonized standards to specific regulation updates, UL Solutions is here to help keep you up to date on changes on the horizon for the toy industry.

Here we highlight some major regulatory changes so you can be prepared to continue creating compliant products for children around the world. Our experts stand ready to answer any questions you may have about these upcoming changes.

Contact us at RCP@ul.com or visit UL.com/Toys.

Europe

PFAS updates on restrictions published and under proposal

Effective date: Various

Several regulatory actions are being taken to regulate per- and polyfluoroalkyl substances (PFAS) in consumer products in the European Union (EU). These toxic substances are also known as “forever chemicals” due to their high persistence. Without the ability to degrade, their concentration in the environment will continue to increase. Exposure to these substances can have negative effects on humans and the environment. PFASs comprise a group of about 10,000 mainly human-made substances used in numerous applications in the EU. These applications include textiles, food packaging materials, lubricants, refrigerants, electronics, construction materials and many more. In the EU, some PFAS are already regulated under the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) regulation and persistent organic pollutants (POP) legislation (see Table 1) and the substances of very high concern (SVHC) list, whereas other groups are being proposed for restrictions (see Table 2).

Table 1

Substance group	Limits in articles	Applicable from
Perfluorooctanoic acid (PFOA) and PFOA-related substances (various Chemical Abstracts Service Registry Numbers®, commonly known as CAS numbers)	25 parts per billion (ppb) as total content and 1,000 ppb for PFOA-related substances	July 4, 2020
Perfluorooctanesulfonic acid (PFOS) (various CAS numbers)	1 microgram per square meter (µg/m2) for treated articles and 0.1% by weight as total content	Aug. 25, 2010
Perfluoroalkyl carboxylic acids (PFCA) and PFCA-related substances (various CAS numbers)	25 ppb for the sum of C9-C14 PFCAs and their salts or 260 ppb for the sum of C9-C14 PFCA-related substances	Feb. 25, 2023
Perfluorohexanesulfonic acid (PFHxS)	25 ppb for the sum of PFHxS and their salts or 1,000 ppb for the sum of PFHxS-related substances	Aug. 28, 2023
Undecafluorohexanoic acid (PFHxA), its salts and related substances	Sum of PFHxA and its salts: <25 ppb Sum of PFHxA related substances: <1,000 ppb	April 10, 2026: firefighting foams for training, testing and public fire services Oct. 10, 2026: textiles, leather, furs and hides in clothing and related accessories for the general public; footwear for the general public; paper and cardboard used as food contact materials within the scope of Regulation (EC) No 1935/2004; mixtures for the general public; cosmetic products as defined in Regulation (EC) No 1223/2009 Oct. 10, 2027: textiles, leather, furs and hides in products other than clothing and related accessories for the general public Oct. 10, 2029: firefighting foams for civil aviation

The current larger proposals for restriction (see Table 2) will cover a greater number of substances with specific exemptions and different dates of entry into force for specific uses.

PFAS is defined as any substance that contains at least one fully fluorinated methyl (CF3-) or methylene (-CF2-) carbon atom without any hydrogen, chlorine, bromine or iodine attached to it.

A substance that only contains the following structural elements is excluded from the scope of the proposed restriction: -CF3-X or X-CF2-X', where X = -OR or -NRR' and X' = methyl (-CH3), methylene (-CH2-), an aromatic group, a carbonyl group (-C(O)-), -OR'', -SR'' or –NR''R''', and where R/R'/R''/R''' is a hydrogen (-H), methyl (-CH3), methylene (-CH2-), an aromatic group or a carbonyl group (-C(O)-).

Table 2

Restriction proposals	Limits in articles	Applicable from
Option 1	Full ban	Still under proposal and there will be a transition period of 18 months without derogations
Option 2	• 25 ppb for any PFAS as measured with targeted PFAS analysis (polymeric PFAS excluded from quantification) • 250 ppb for the sum of PFAS measured as sum of targeted PFAS analysis, optionally with prior degradation of precursors (polymeric PFAS excluded from quantification) • 50 ppm for PFASs (polymeric PFASs included) If total fluorine exceeds 50 milligrams of fluorine per kilogram (mg F/kg), the manufacturer, importer or downstream user shall provide proof of the fluorine measured as content of either PFAS or non-PFAS to the enforcement authorities upon request.	Still under proposal and there will be a transition period of 18 months with derogation for some uses

In spring 2024, there were some EU Initiatives at the state level (Denmark and France) to introduce a legislation to limit PFAS that could enter into force in 2026, before the actual proposal under REACH for PFAS.

The Danish government proposed to introduce a national ban on PFAS in clothing, shoes and waterproofing agents. PFAS in professional clothing and safety clothing will not be part of the ban.

The executive order on the ban is expected to be ready on July 1, 2025. The government has proposed to give business a transition period of one year so that the ban applies starting July 1, 2026. The ban will be implemented in practice by setting limit values that ensure that PFAS cannot be deliberately used in clothing, shoes and impregnation.

Elsewhere in the EU, France's National Assembly recently approved the first reading of a bill that would restrict the manufacture and sale of nonessential products containing PFAS, the first step in the legislative process.

This draft law is intended to protect the population from the risks linked to perfluoroalkyl and polyfluoroalkyl substances. It proposes, starting Jan. 1, 2026, the prohibition of the manufacture, importation, exportation and placing on the market of various products including cosmetic, wax and textile clothing products. It also proposes to completely prohibit the use of PFAS in any textile product by Jan. 1, 2030.

The main changes are related to the following:

- Two new test methods for container closures (closure test A or closure test B) can be used as alternatives to EN ISO 8317:2015.
- References to the “manufacturer” are removed from evaluations, specifying the instructions and safety assessment of child-resistant containers, and the manufacturer no longer specifies the age rating of gustative games, cosmetic kits and supplementary sets (set at 3 years or older) or olfactory board games, cosmetic kits, gustative games and supplementary sets that contain highly flammable liquids (set at 8 years or older).
- The reference to EN 71 Part 9, Organic Chemical Compounds — Requirements, has been removed because this standard has been withdrawn.

CEN updates for EN 71 series standards

Effective date: Various

In December 2024, the Comité Européen de Normalisation (CEN) published the amendment to one of the most important standards for toys, EN 71-3:2019+A2:2024, for the migration of 19 elements regulated under EU Toy Safety Directive 2009/48/EC.

The following is a summary of the main changes. These updates help promote greater accuracy and safety in the manufacturing and testing of toys.

- Sampling and sample preparation have been revised and restructured to improve the user-friendliness of the standard. In particular, the dewaxing procedure has been deleted.
- The updated standard incorporates the CEN/TS 17973:2023 guidelines for categorizing products with slime-like properties.

In addition to EN 71-3, another standard, EN 71-13:2021+A2:2024, was updated in November 2024.

This document applies to olfactory board games, cosmetic kits, gustative games and supplementary sets. It specifies requirements for the use of substances and mixtures and in some cases for their amount and concentration in olfactory board games, cosmetic kits, gustative games and supplementary sets to such games or kits.

Moreover, in December 2024, two new standards have been published for analysis of chemical substances restricted under Appendix C.

This appendix contains specific limit values for chemicals used in toys intended for use by children under 36 months of age or in other toys intended to be placed in the mouth and adopted in accordance with Article 46(2) EU Toy Safety Directive 2009/48/EC:

- EN 71-15 Safety of Toys – Part 15: Formamide in Foam Toy Materials (Content)
- EN 71-16:2025 Safety of Toys – Part 16: Certain Chlorinated Phosphorus Flame Retardants (TCEP, TCPP, TDCP) in Toy Materials
- EN 71-17:2025 Safety of Toys – Part 17: Certain Isothiazolinones (MIT, CIT, BIT) in Aqueous Toy Materials
- EN 71-18:2024 Safety of Toys – Part 18: Phenol in Aqueous (Content) and Polymeric (Migration) Toy Materials
- EN 71-19:2024 Safety of Toys – Part 19: Migration of Bisphenol A from Toy Materials

Finally, EN 71-20, a standard for microbiological safety of toys containing accessible aqueous media is under approval to be published in 2025.

The proposed standard will address microbiological safety of toys containing accessible aqueous media. The standard will set limits for the number of harmful bacteria, yeasts and molds that can be present in a toy as received and set test methods to evaluate whether such toys have an adequate preservative system.

The updated and newly published standards are expected to be harmonized under the EU Toy Safety Directive 2009/48/EC after being accepted by the European Commission and published in the Official Journal of the European Union. After that date, the new references shall be used for the presumption of conformity of toys to safety requirements of Toy Safety Directives.

Ongoing activities pertaining to the EU Toy Safety Regulation proposal

Effective date: N/A (the regulation has not been published yet)

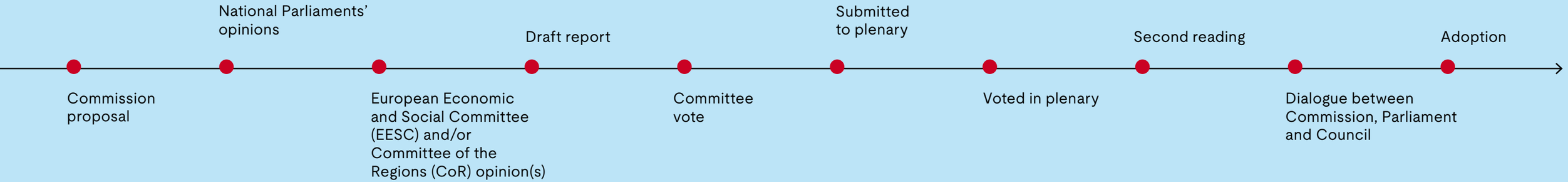
The new EU Toy Safety Regulation has been drafted and discussed within European institutions — Parliament, Council and Commission — for some time.

The first draft of the regulation dates to July 2023, when public consultations opened. These closed at the end of October 2023, yielding more than 100 comments and leading to the institutions' revisitation of the text.

Most of the comments (more than 60%) were submitted by companies and their associations.

Following public consultation and discussions within the institutions, two texts were published in 2024 — one by the European Parliament and one by the European Council — containing their respective opinions and proposed amendments to the text proposed by the Commission.

The first dialogue between the Commission, Parliament and Council on the proposed regulation on toy safety occurred on Nov. 20, 2024, during which the Parliament and the Council presented their mandates and priorities. Rapporteur Marion Walsmann, European People's Party (EPP), reported to members of the Committee on Internal Market and Consumer Protection (IMCO) on the work at the Commission meeting on Dec. 3, 2024.



In summary, the Parliament's position is:

- Smart toys must meet safety, security and privacy requirements by design.
- There is a need for a comprehensive ban on the most harmful chemicals.

While waiting for the dialogue between the institutions to lead to a definitive text of the regulation, the regulatory work carried out by CEN does not stop, continuing to develop in accordance with the provisions of the current Directive 2009/48/EC and the Commission's mandate.

> "Children deserve the safest toys possible. With the revised safety rules, we are giving them just that. We protect them from invisible dangers such as harmful chemicals and ensure that warnings such as age limits are clearly visible online. The recently introduced Digital Product Passport will ensure that consumers can access the necessary information. At the same time, trade secrets will be protected — a strong signal of fair competition and that Europe is the place to do business."
>
> — **The rapporteur**

Restrictions published under REACH: Formaldehyde

Effective date: Aug. 6, 2026

On July 14, 2023, the European Commission published a new entry in Annex XVII of REACH regarding formaldehyde and formaldehyde releasers.

The restriction specifies that formaldehyde and formaldehyde releasers shall not be placed on the market in articles after Aug. 6, 2026, if, under the test conditions specified in Appendix 14, the concentration of formaldehyde released from those articles exceeds:

- 0.062 milligram per cubic meter (mg/m3) for furniture and wood-based articles
- 0.080 mg/m3 for articles other than furniture and wood-based articles

Such substances shall not be placed on the market in road vehicles after Aug. 6, 2027, if, under the test conditions specified in Appendix 14, the concentration of formaldehyde in the interior of those vehicles exceeds 0.062 mg/m3.

Formaldehyde and formaldehyde-releasing substances are manufactured and used in multiple areas in the EU. Formaldehyde is mostly used as a chemical intermediate to manufacture formaldehyde-based resin and other chemicals and has limited applications as a biocide. Formaldehyde releasers are mainly used in producing articles such as wood-based products, furniture, wall coverings, foams and textiles that can release formaldehyde during use.

Articles subject to restrictions on carcinogenic, mutagenic and reprotoxic (CMR) materials in the textile's restriction (within the scope of Entry 72 of Annex XVII of Regulation (EC) No. 1907/2006) and the use of formaldehyde and formaldehyde releasers as a biocide are exempted from the restriction.

Other exemptions apply to:

- Articles made from materials that exclusively naturally contain formaldehyde or formaldehyde-releasing substances.
- Articles that are exclusively for outdoor use under foreseeable conditions.
- Articles in constructions for exclusive use outside the building shell and vapor barrier and that do not emit formaldehyde into indoor air.
- Articles exclusively for industrial or professional use unless formaldehyde released from them leads to exposure to the general public under foreseeable conditions of use.
- Devices within the scope of Regulation (EU) 2017/745.
- Personal protective equipment within the scope of Regulation (EU) 2016/425.
- Articles intended to come into contact directly or indirectly with food within the scope of Regulation (EC) No. 1935/2004.
- Secondhand articles.

To mitigate the impact, decrease costs for the affected areas and provide sufficient time for stakeholders to implement the restriction, the transition period for applicability of the restrictions is 36 months for all sectors. For road vehicles, a deferral of 48 months is deemed appropriate due to the long development and marketing time for such products; the high material requirements in the automotive industry; the complex supply chains, including original equipment manufacturers; and the time needed to implement the standard analytical method for measuring emissions for trucks and buses.

The regulation applies to a wide range of products including but not limited to toys, furniture, electrical appliances, babies' and children's products, and fitness equipment not exclusively intended for outdoor use. It specifically mentions that even though toy products already have formaldehyde restriction requirements, they still need to comply with the newly added provisions.

What about batteries?

A new EU battery regulation, Regulation 2023/1542, was recently approved, and it will replace Battery Directive 2006/66/EC and also introduce requirements in many new areas of sustainability and safety of batteries and battery-operated products.

The new regulation contains multiple articles that will come into force with different timelines, affecting the battery supply chain.

Key sustainability areas covered include:

- Design requirements
- Information and traceability
- End of life
- Due diligence

Applicability of the battery regulation depends on battery type.

To learn more about the new EU battery regulations, visit UL.com/EU-Battery-Regulation.

Americas

Water beads

Effective date: To be defined

On Sept. 9, 2024, the U.S. Consumer Product Safety Commission (CPSC) published a proposed rule to establish a safety standard for water bead toys and toys containing water beads. The proposed rule would add performance and labeling requirements to address the risk of injury and death associated with children ingesting water beads, aspirating and choking on them, or inserting them into the nose or ear. The proposed rule:

- Defines a water bead as a “spherical or spheroid water-absorbent object, intended to expand in size when immersed in a liquid.”
- Establishes limits for acrylamide in water beads.
- Updates labeling requirements.
- Amends the lists of notice of requirements (NORs) to include water beads and toys containing water beads.

According to the proposed rule, if water beads expand to larger than 9.0 millimeters (mm) or more than 50% greater than their original size, they either will need to be modified or be taken off the market. While the CPSC did extend the original time period, they are no longer accepting comments. They have not yet released a final rule.

eFiling: Digitizing Certificates of Compliance

Effective date: To be defined

The Consumer Product Safety Commission (CPSC) has published within the Federal Register the Final Rule regarding Certificates of Compliance (CoCs) and electronic filing (eFiling) of the CoC data.

In collaboration with the Customs and Border Protection (CBP), the CPSC has established an Automated Commercial Environment (ACE) system for importers and manufacturers to upload CoC data into a database-like environment for the CPSC and CBP to pull information as needed for imported products.

The scope of what will require eFiling would be any product that falls under CPSC jurisdiction that would require a CoC. Examples of CoCs are a General Conformity Certificate (GCC), which would apply to general-use and nonchildren's products, as well as the Children's Product Certificate (CPC), which would be applicable to products intended for children under 12 years of age. eFiling will be required not only for products imported into the United States for consumption, but also for products to be warehoused or stored domestically.

The Final Rule clarifies and specifies requirements of CoCs and eFiling as set forth in 16 CFR 1110. Until implementation, the CPSC welcomes importers and manufacturers to apply to partake in the currently ongoing Voluntary Phase, which allows those who wish to eFile before the rule is final without being penalized for errors..

eFiling allows the CPSC to maintain and evaluate an importer's and/or manufacturer's risk score using the Risk Assessment Methodology (RAM), which can help determine which manufacturers and products are considered to be at greater risk regarding safety and compliance.

PFAS updates

Effective date: Various

Several states enacted legislate on “intentionally added” PFAS on various consumer products. Though there is some variation between the state laws, “intentionally added” PFAS generally means PFAS chemicals that a manufacturer has intentionally added to a product and that have a functional or technical effect on the product, including PFAS chemicals that are breakdown products of an added chemical.

This table is not an exhaustive list but details numerous U.S. state laws with effective dates in 2025 which may impact juvenile products, including toys. States with effective dates of 2026 and 2027 are also included.

Jurisdiction	Legislation (source)	Focus	Effective date	Regulation summary
California	AB 1817	Textile articles	Jan. 1, 2025	Prohibits textile articles containing PFAS. Examples of textile articles include apparel, bedding, furnishings, and backpacks.
Connecticut	SB 292	Children’s products Textile articles	July 1, 2026	Prohibits textiles articles containing intentionally added PFAS, unless manufacturer provides prior notification to the Department of Energy and Environmental Protection (DEEP)
Maine	Public Law 2023, c. 630	Juvenile products Textile articles	Jan. 1, 2026	Prohibits intentionally added PFAS in juvenile product. “Juvenile product” means a product designed or marketed for use by infants and children under 12 years of age including, but not limited to: a baby or toddler foam pillow; bassinet; bedside sleeper; booster seat; changing pad; child restraint system for use in motor vehicles and aircraft; co-sleeper; crib mattress; highchair; highchair pad; infant bouncer; infant carrier; infant seat; infant sleep positioner; infant swing; infant travel bed; infant walker; nap cot; nursing pad; nursing pillow; play mat; playpen; play yard; polyurethane foam mat, pad or pillow; portable foam nap mat; portable infant sleeper; portable hook-on chair; soft-sided portable crib; stroller; and toddler mattress.
Minnesota	HF 2310	Children’s products	Jan. 1, 2025	Prohibits sale of carpets and rugs, cleaning products, cookware, cosmetics, dental floss, fabric treatments, juvenile products, menstrual products, textile furnishings, ski wax, and upholstered furniture containing PFAS. Contains other provisions.
New Hampshire	HB 1649	Juvenile products	Jan. 1, 2027	Prohibits sale of carpets and rugs, cosmetics, textile treatments, food packaging and containers, juvenile products, menstrual products, textile furnishings, and upholstered furniture containing PFAS from containing intentionally added PFAS.
Rhode Island	S 2152/H 7356	Juvenile products	Jan. 1, 2027	Prohibits sale of artificial turf, carpets and rugs, cookware, fabric treatments, juvenile products, ski wax, and textile articles from containing intentionally added PFAS.
Vermont	S 25	Juvenile products	Jan. 1, 2026	Prohibits intentionally added PFAS in juvenile product. “Juvenile product” means a product designed or marketed for use by infants and children under 12 years of age, including but not limited to a baby or toddler foam pillow; bassinet; bedside sleeper; booster seat; changing pad; infant bouncer; infant carrier; infant seat; infant sleep positioner; infant swing; infant travel bed; infant walker; nap cot; nursing pad; nursing pillow; play mat; playpen; play yard; polyurethane foam mat, pad, or pillow; portable foam nap mat; portable infant sleeper; portable hook-in chair; soft-sided portable crib; stroller; toddler mattress; and disposable, single-use diaper.

Asia

China: Toy Standard updates (GB/T 19865-2024)

Effective date: Jan. 8, 2026

The State Administration for Market Regulations (Standardization Administration of the People's Republic of China) has approved the modification of the standard safety of electric toys, GB/T 19865-2024, which replaces GB 19865-2005. It should be noted that it is now a voluntary standard. This standard is modified to adopt the International Electrotechnical Commission (IEC) international standard, IEC 62115:2017. Some of the key changes are as follows:

- A warning pictogram and a statement for toys that are operated by coin or button batteries was added.
- A high-voltage test for toys that use USB connections was added.
- Temperature rise limits are revised based on the type of material used and the age range of the target user.
- The test parameter and method for the mechanical strength test was revised.
- LED requirements were modified to align with Annex E of IEC 62115:2017.

Japan: Updates on the Consumer Product Safety Act (toy legislation)

Effective date: To be defined

Toys and other products for children that are manufactured overseas do not always meet technical standards for the safe use by children. Manufacturers often have to deal with accidents after they occur. Japan will take the following measures to address this challenge and help prevent accidents involving these types of products.

The revised legislation will designate provisions in which the manufacturer and importer of children's products are required to have the products meet technical standards as specified by the government and indicate a warning about the use of products, including the intended age range and any precautions for use.

The revised legislation will also impose special measures in which a business intending to sell used products specifically for children is allowed to sell them in Japan provided that the business established a framework for raising public awareness about safety and meeting the technical standards of the used products for consumers.

Other countries

New Zealand and South Africa: Updates to requirements for lead in paints

Effective date: South Africa applicable from May 16, 2025, New Zealand applicable from March 1, 2025

South Africa Issued Regulations Relating to Lead in Paint or Coating Materials, 2024 (Gazette No. 50665 (No. 4832)) on May 17, 2024.

This law provides the following:

- Sets a limit value of ≤90 mg/kg (0.009% or 90 ppm) for the weight of the total nonvolatile content of the paint or weight of the dried paint film for lead content in paints and similar coating materials (effective May 17, 2025).
- Mandates a declaration of compliance (DoC) certificate for the first production batch or lot of paint or similar coating materials and in the event of a material change (effective May 17, 2025).
- Details labeling requirements (effective May 17, 2026).

Coating materials in this context are defined as products in liquid, paste or powder form, which, when applied to a substrate, forms a layer possessing protective, decorative and other specific properties.

New Zealand's Environmental Protection Agency (EPA) has issued Group Standards (Reducing Lead) Amendment Notice 2024 to update the maximum allowable lead levels in the paints and update the element migration limits in graphic materials.

Key changes are to:

- Cut lead impurity limits in paints, including corrosion inhibitors
- Require test results showing lead levels.
- Ensure all graphic materials marketed to children only fit the Graphic Materials Group Standard, which only allows products with no health risks
- Cut the levels of migratable lead and other toxic elements in graphic. materials marketed for children.
- Remove the need to give the EPA results of migratable element testing of graphic materials (to match other group standards and international regulators).

Sources

1. Regulation (EU) 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants (recast) (Text with EEA relevance)Text with EEA relevance
2. COMMISSION REGULATION (EU) 2021/1297 of 4 August 2021 amending Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council as regards perfluorocarboxylic acids containing 9 to 14 carbon atoms in the chain (C9-C14 PFCAs), their salts and C9-C14 PFCA-related substances
3. Commission Delegated Regulation (EU) 2023/1608 of 30 May 2023 amending Annex I to Regulation (EU) 2019/1021 of the European Parliament and of the Council as regards the listing of perfluorohexane sulfonic acid (PFHxS), its salts and PFHxS-related compounds
4. DELEGATED REGULATION (EU) 2023/1608 of 30 May 2023 amending Annex I to Regulation (EU) 2019/1021 of the European Parliament and of the Council as regards the listing of perfluorohexane sulfonic acid (PFHxS), its salts and PFHxS-related compounds
5. Persistent organic pollutants – perfluorohexane sulfonic acid (PFHxS)
6. Registry of restriction intentions until outcome
7. Submitted restrictions under consideration
8. PFAS-handlingsplan: Regeringen vil indføre dansk forbud mod PFAS i tøj og sko
9. Protéger la population des risques liés aux substances per- et polyfluoroalkylées (PFAS)
10. Commission Regulation (EU) 2024/2462 of 19 September 2024 amending Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council as regards undecafluorohexanoic acid (PFHxA), its salts and PFHxA-related substances
11. CEN/TC 52-Safety of toys
12. Toy safety regulation European Parlament
13. Commission Regulation (EU) 2023/1464 of 14 July 2023 amending Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council as regards formaldehyde and formaldehyde releasers
14. Federal Register, Vol. 89, No. 174 (Monday, September 9, 2024)
15. Federal Register, Volume 90 Issue 5 (Wednesday, January 8, 2025)
16. Proposition 65: Clear and Reasonable Warnings – Safe Harbor Methods and Content - OEHHA
17. Safety of electric toys
18. Cabinet Decision on the Bill for the Act for Partially Amending the Consumer Product Safety Act and Other Related Acts
19. Hazardous Substances ACT, 1973
20. Group Standards (Reducing Lead) Amendment Notice 2024 - 2024-au4158 - New Zealand Gazette

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