



H&M GROUP CHEMICAL RESTRICTIONS 2024

RESTRICTED SUBSTANCES LIST (RSL)

Toys

Valid for all brands in the H&M Group.

Group Compliance



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General

H&M Group Chemical Restrictions consist of several parts regarding different product types; this document concerns Chemical Restrictions for Toys.

An introduction to and general information about the H&M Group Chemical Restrictions are available in a separate document: H&M Group Restricted Substance List (RSL) Introduction and Commitment - All Product Types, document ID 00432. Please read that document and refer to the examples provided there, before proceeding with the product specific restrictions.

Each limit specified in this document is valid for homogeneous parts of the concerned product if not otherwise stated. Test methods are specified when relevant in this document. In case of undated test method, the latest version is valid.

Definitions

| | |
|--|---|
| Concentration Limit | The substance must not be present in the product at concentrations above this limit. |
| Usage ban | The substance must not be used in production and it must not be added to the product ¹ . |
| Homogeneous | Uniform composition throughout, i.e. a material that cannot be mechanically disjointed into different materials. |
| Safety Data Sheets | All chemicals used should have Safety Data Sheets, SDS, showing that they do not contain restricted substances. More information about SDS can be found in the AFIRM Toolkit ² , appendix H. |
| Substances defined as hazardous due to intrinsic properties. | Persistent, bioaccumulative and toxic (PBT), very persistent and very bioaccumulative (vPvB), carcinogenic, mutagenic and toxic for reproduction (CMR), endocrine disruptors (ED) or equivalent concern |

Abbreviations

| | |
|--------|---|
| CAS no | Chemical Abstracts Service number, an identification number for chemicals in this database. |
| CMR | Carcinogenic, Mutagenic or toxic for Reproduction |
| ppm | Parts per million, which is the same as mg/kg. |
| REACH | Registration, Evaluation, Authorization and restriction of Chemicals |
| SVHC | Substances of Very High Concern |
| SDS | Safety Data Sheet |

¹ Impurities at low concentrations of these substances may be accepted only if technically unavoidable due to e.g. raw materials, formation in the manufacturing process, storage or packaging.

² www.afirm-group.com/toolkit/

Requirements

| General requirements | | |
|---|---|-----------------------------------|
| H&M Group Chemical Restrictions – Textile Products, Accessories, Footwear, Bags and Belts | All soft toys and costumes/dress-up must comply with <i>H&M Group Chemical Restrictions Textile Products, Accessories, Footwear, Bags and Belts</i>, both with respect to production and product requirements. | |
| H&M Group Chemical Restrictions – Chemical products | Toys that are also chemical products as pens, crayons and paint must comply with requirements in <i>H&M Group Chemical Restrictions Chemical products</i> . | |
| H&M Group Chemical Restrictions – Cosmetic products | For toys that are also cosmetic products, the content/formula of the product must comply with requirements in <i>H&M Group Chemical Restrictions Cosmetic Products</i> . | |
| H&M Group Chemical Restrictions – Non-Commercial Goods (NCG), Construction and Packaging | If the toy is sold in a packaging, this must also comply with <i>H&M Group Chemical Restrictions Non-Commercial Goods (NCG), Construction and Packaging</i> . | |
| Toy standards – applicable for all markets | | |
| European Standards for Safety of Toys EN 71 | All toys must comply with and be tested according to the latest valid edition of stated EN 71 Toy standards. | |
| | Applicable material and type of toy to be tested | |
| | EN 71-3; Migration of certain elements | Applicable for all toy material |
| | EN 71-12; N-Nitrosamines and N-nitrosatable substances | Applicable for Plastic and Rubber |
| EN 71-9; Organic chemical compounds – Requirements Method: EN 71-10 and EN 71-11 | According to Table 1 in EN 71-9 (contact your testing lab for advice). Check clauses 4.2 (Liquids) and 4.3 (Formaldehyde) in EN 71-9, as applicable | |
| ASTM F963 | All toys must comply with and be tested for valid edition of US Standard ASTM F963. | |
| NB-TOYS/2012/26, EC type approval protocol No. 2 Microbiological safety of toys containing aqueous media | All toys containing aqueous media which the child is likely to become exposed to during normal or foreseeable use of the toys must comply with NB-TOYS/2012/26, EC type approval protocol No. 2 | |

| Country specific standards/test requirements | | |
|--|--|--|
| Market | Standard/Test/Law | Requirement |
| Australia | AS/NZS ISO 8124-3 | All toys for the Australian market must comply with and be tested according to the latest valid edition of AS/NZS ISO 8124-3. |
| China | GB 31701-2015 <i>Safety Technical Code for Infants and Textile Products (phthalates and total lead and cadmium)</i> And GB 6675.1-2014 <i>Phthalate content</i> GB 6675.4-2014 <i>Migration of certain elements</i> | Disguise costumes including accessories to costumes shall comply with GB 31701-2015 and GB 6675.4-2014. The Phthalate contents in plasticized material shall comply with GB 6675.1-2014 table 2. Soft toys shall comply with GB 6675.4-2014. Please see separate <i>Test Routine for Soft Toys and Disguise Costumes for China</i> . |
| Japan | Japanese Food Sanitation Law (JFSL) | All toys for the Japanese market must comply with and be tested according to Japanese Food Sanitation Law (JFSL) Section IV "Toys". Tests should be performed at an official MHLW registered laboratory ³ who will issue certificate of analysis showing compliance. |
| Turkey | Phthalates and azo | All toys for the Turkish market must be tested for phthalates and azo dyes. Plastic should be tested for phthalates and textile materials should be tested for azo dyes. More information is to be found in <i>TR – Toys Shipping Instructions</i> . For limits and test methods see <i>H&M Group Chemical Restrictions Textile Products, Accessories, Footwear, Bags and Belts</i> . |
| USA | CPSIA | All toys for the US market must be tested for lead and phthalates according to the <i>CPSIA routine</i> found on Inside. A certificate should be made based on the third-party test results. |
| Chile | Decree No 114 of 2005 (Regulations on Toys Safety) | Toys and children's articles containing toluene more than 170 ppm are not allowed to be distributed or sold in Chile; Toys and Children's articles importing to Chile shall be accompanied by a certification showing that the content of toluene does not exceed the requirement above |
| India | IS 9873 (part 3)-Migration of certain elements IS 9873 (part 9)-Certain Phthalates Esters. | All toys shipped to India needs to be BIS certified and the Toys products should be tested as per Indian Standard (IS 9873) for physical & chemical testing from BIS accredited labs. |

³ A list of the official MHLW registered laboratories can be found at the following MHLW website: <http://www.mhlw.go.jp/english/topics/importedfoods/1-10.html>

| Requirements based on classification | |
|--|---|
| CMR - Carcinogenic, Mutagenic or toxic for Reproduction | Substances that are classified as carcinogenic, mutagenic or toxic for reproduction (CMR) of category 1A, 1B or 2 shall not be used in toys, in components of toys or in micro-structurally distinct parts of toys. |
| Material requirements | |
| Polycarbonate (PC) plastic | Usage ban |

| Restricted substance | CAS no | Concentration Limit | Applicable Materials | | | | | | | | Test method/ Standard | |
|--|----------|--|--|----------------|----------------------|-------|-------------------|---------------------|---------------|---------------------|--------------------------|---|
| | | | Plastic | Rubber | Coating/ Printing | Metal | Natural fibres | Synthetic fibres | Paper Wood | Aqueous material | | |
| Polyaromatic hydrocarbons (PAH) | | | | | | | | | | | | |
| | | Toys which are intended to be taken in the mouth or intended to have long-term skin contact (longer than 30 seconds) | Toys with predictable skin contact longer than 30 seconds (long-term skin contact) or repeated short-term skin contact | All other toys | | | | | | | | AfPS Extraction with toluene followed by GC-MS analysis (reporting limit 0.2 ppm) |
| Benzo[a]anthracene | 56-55-3 | < 0.2 ppm | < 0.2 ppm | < 0.5 ppm | | | | | | | | |
| Benzo[a]pyrene | 50-32-8 | < 0.2 ppm | < 0.2 ppm | < 0.5 ppm | • | • | • | | | | | |
| Benzo[b]fluoranthene | 205-99-2 | < 0.2 ppm | < 0.2 ppm | < 0.5 ppm | | | | | | | | |
| Benzo[e]pyrene | 192-97-2 | < 0.2 ppm | < 0.2 ppm | < 0.5 ppm | | | | | | | | |
| Benzo(g,h,i)perylene | 191-24-2 | < 0.2 ppm | < 0.2 ppm | < 0.5 ppm | | | | | | | | |
| Benzo[j]fluoranthene | 205-82-3 | < 0.2 ppm | < 0.2 ppm | < 0.5 ppm | | | | | | | | |
| Benzo[k]fluoranthene | 207-08-9 | < 0.2 ppm | < 0.2 ppm | < 0.5 ppm | | | | | | | | |
| Chrysene | 218-01-9 | < 0.2 ppm | < 0.2 ppm | < 0.5 ppm | | | | | | | | |
| Dibenzo[a,h]anthracene | 53-70-3 | < 0.2 ppm | < 0.2 ppm | < 0.5 ppm | | | | | | | | |
| Indeno(1,2,3-c,d)pyrene | 193-39-5 | < 0.2 ppm | < 0.2 ppm | < 0.5 ppm | | | | | | | | |

| Restricted substance | CAS no | Concentration Limit | | | Applicable Materials | | | | | | | | Test method/ Standard |
|-------------------------------|----------|---|-------------|--------------|----------------------|--------|----------------------|-------|-------------------|---------------------|---------------|---------------------|---|
| | | | | | Plastic | Rubber | Coating/ Printing | Metal | Natural fibres | Synthetic fibres | Paper Wood | Aqueous material | |
| Acenaphthene | 83-32-9 | Sum < 1 ppm | Sum < 5 ppm | Sum < 20 ppm | | | | | | | | | |
| Acenaphthylene | 208-96-8 | | | | | | | | | | | | |
| Anthracene | 120-12-7 | | | | | | | | | | | | |
| Fluoranthene | 206-44-0 | | | | | | | | | | | | |
| Fluorene | 86-73-7 | | | | | | | | | | | | |
| Phenanthrene | 85-01-8 | | | | | | | | | | | | |
| Pyrene | 129-00-0 | | | | | | | | | | | | |
| Naphthalene | 91-20-3 | < 1 ppm | < 2 ppm | < 10 ppm | | | | | | | | | |
| <i>Sum of 18 PAH</i> | | < 1 ppm | < 5 ppm | < 20 ppm | | | | | | | | | |
| Bisphenol A | 80-05-7 | 0.04 mg/l (migration limit) | | | • | | • | | | • | | | EN 71-10 and EN 71-11 |
| Styrene | 100-42-5 | 0.75 mg/l (migration limit) | | | • | • | • | | | | | | EN 71-10 and EN 71-11 |
| Styrene-based polymers | Various | Upcoming restriction for Toys. The restriction will be extended to all product categories by the end of 2030. | | | • | • | | | | | | | Input control |
| Formamide | 75-12-7 | <i>Foam material:</i> 200 mg/kg (total amount) | | | • | • | | | | | | | Acetone extraction using ultrasound followed by GC/MS analysis. |
| Formaldehyde | 50-00-0 | <p><i>Textile components</i> of toys intended for children ≤ 3 years of age. Each part of the product (e.g., main fabric, print, fusing and binding) must comply with the restriction limit: (A-A0) < 0.05 (16 mg/kg). The whole order must fulfil this requirement. Textile components of toys intended for children > 3 years of age must comply with the restriction limit: 75 mg/kg.</p> <p><i>Leather components</i> of toys intended for Children ≤ 3 years of age must comply with the restriction limit: 30 mg/kg</p> <p><i>Paper components</i> of toys intended for Children ≤ 3 years of age must comply with the restriction limit:</p> | | | • | • | • | | • | • | • | | <p><i>Textile:</i> JIS L 1041-2011, Method A (Reporting limit: (A-A0) < 0.02 (=5 mg/kg)) or ISO 14184-1 (Reporting limit 16 mg/kg).</p> <p><i>Leather:</i> EN ISO 17226-1</p> <p><i>Plastic, Rubber, Coating and Printing:</i> EN 71-10 and EN 71-11</p> |

| Restricted substance | CAS no | Concentration Limit | Applicable Materials | | | | | | | Test method/ Standard |
|---|------------|---|----------------------|--------|--------------------|-------|-------------------|---------------------|---------------|--|
| | | | Plastic | Rubber | Coating/ Paints | Metal | Natural fibres | Synthetic fibres | Paper Wood | |
| | | <p>30 mg/kg. Children > 3 years of age must comply with the restriction limit: 75 mg/kg. If an order includes products intended for children under 3 years of age, the whole order must fulfil this requirement.</p> <p><i>Resin-bonded wood components</i> of toys shall not release formaldehyde more than 0.1 ml/m³</p> <p>Water based Toy material shall not exceed 10mg/kg</p> <p><i>Polymeric components</i> of toys intended for children ≤ 3 years of age must comply with the restriction limit: 1.5 mg/l (migration limit).</p> | | | | | | | | <p><i>Paper:</i> EN 645 and EN 1541 (Reporting limit 5 mg/kg)</p> <p><i>Wood:</i> EN 717-3</p> |
| Phenol | 108-95-2 | <p><i>In polymeric materials including polymeric coating if thicker than 500 µm:</i> 5 mg/l (migration limit) <i>As a preservative in water-based toy-material:</i> 10 mg/kg (total amount)</p> | • | • | • | | | | • | EN 71-10 and EN 71-11 |
| BIT (1,2-Benzisothiazol-3 (2H) –one) | 2634-33-5 | ≤ 5 mg/kg (total amount) for aqueous material | | | | | | | • | EN 71-10 and EN 71-11 |
| CMI and MI (3:1) (5-Chloro-2-methyl-4- isothiazolin-3-one and 2-methyl-2H-isothiazol- 3-one (3:1)) | 55965-84-9 | ≤ 1 mg/kg (total amount) for aqueous material | | | | | | | • | EN 71-10 and EN 71-11 |
| CMI (5-Chloro-2- methylisothiazolin-3 (2H) –one) | 26172-55-4 | ≤ 0.75 mg/kg (total amount) for aqueous material | | | | | | | • | EN 71-10 and EN 71-11 |
| MI (2-methylisothiazolin-3 (2H) –one) | 2682-20-4 | ≤ 0.25 mg/kg (total amount) for aqueous material | | | | | | | • | EN 71-10 and EN 71-11 |

| Restricted substance | CAS no | Concentration Limit | Applicable Materials | | | | | | | | Test method/ Standard |
|---|------------|--|---|--------|----------------------|-------|-------------------|---------------------|---------------|---------------------|--|
| | | | Plastic | Rubber | Coating/ Printing | Metal | Natural fibres | Synthetic fibres | Paper Wood | Aqueous material | |
| Flame retardants | | | | | | | | | | | |
| TCEP (Tris (2-chloroethyl) phosphate) | 115-96-8 | 5 mg/kg each for children under 36 months and in other toys intended to be placed in the mouth | | | | | | | | | EN ISO 17881-1/2 |
| TDCP (Tris(1,3-dichloro-isopropyl) phosphate) | 13674-87-8 | | | | | | • | • | | | |
| TCPP (Tris(1-chloro-2-propyl)phosphate) | 13674-84-5 | | | | | | | | | | |
| Aniline | 62-53-3 | 30 mg/kg after reductive cleavage in textile toy material and leather toy material 30 mg/kg after reductive cleavage in finger paints | | | | | • | • | | • | EN ISO 14362-1 (textile) EN ISO 17234-1 (leather) |
| Toluene | 108-88-3 | 170 ppm | All Materials types used for Toys and meant to be shipped to Chile. | | | | | | | | Headspace GC/MS analytic method |

Version history table

| Version | Date | Valid from | Changes made | Page or Chapter |
|---------|-----------|------------|---|-----------------|
| 6 | 1/12/2023 | 21-Aug-23 | Toluene tests added for Chile market | Page 6,10 |
| 6 | 1/12/2023 | 01-Feb-24 | Indian Standard test method added for India market | Page 6 |
| 6 | 29/1/2023 | 01-Feb-24 | Formaldehyde test requirement updated for resin-bonded wood component | Page 9 |
| 6 | 29/1/2023 | 01-Feb-24 | Formaldehyde test requirement added for water-based Toy material | Page 9 |
| 6 | 29/1/2023 | 01-Feb-24 | TCPP test has been added under Flame retardants | Page 10 |