

1. Toy Directives.

All components, substances and mixtures delivered to Cartamundi, shall always be compliant to the Toy Directive 2009/48/EC also for the aspects not already covered in EN 71.

We require full compliance to EN 71-1 for components in playable format or the game in total EN 71-2 for every component in playable format or the game in total EN 71-3 for all <u>19 elements</u> described in 2009/48/EC EN 71-9 for all components, substances or mixtures as tested in the state they will appear on the toy even if they do not fall explicitly in one of the categories described in the directive

No organic substance present in EN 71-9 shall be added intentionally, not even below the limit without the written approval of Cartamundi

- 2. Other Directives and requirements.
 - 2.1. General.

Products, components or games shall NEVER contain any of the substances listed as carcinogenic, mutagenic or toxic to reproduction as listed in REACH. Products, components or games shall NEVER contain any of the substances listed in REACH Annex XVII, the SVHC list (or in the future Annex XIV) in concentrations higher than allowed. If one of these substances is intentionally added below the limit , in pure state or in a mixture, Cartamundi shall be notified before shipment and approval must be given.

Products, components or games shall always be compliant to the general product safety directive 2001/95/EC and the CE-directive 93/68/EC. Products of CMR classes 1, 1A, 1B or 2 as described in 1272/2008/EC are never allowed in Cartamundi products.



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2.2. Specific.

2.2.1. Heavy metals.

Besides the migration limits specified in the Toy Directive, total heavy metal content shall be lower than the indicated limit.

	EU	US	required limit
Lead, Mercury, Chromium VI, Cadmium	94/62/EC (packaging waste)		Sum < 100 ppm
Lead	REACH Annex XVII par 16 and 17, SVHC list certain pigments	16 CFR 1603 (surface coatings) CPSIA sect 101 (substrates)	< 40 ppm
Cadmium	REACH Annex XVII par 23		< 75 ppm
Tin as organoTin	REACH Annex XVII par 20		Limit of 2009/48
Arsenic	REACH Annex XVII par 19		< 100 ppm
Mercury	REACH Annex XVII par 18		< 10 ppm
Cobalt	SVHC as Cobalt Dichloride		< 1000 ppm
Chromium	SVHC as certain pigments		< 100 ppm

Regarding allergenic heavy metals this applies only to Nickel plated products that come into contact with the skin.

REACH Annex XVII par 27: maximum 0.2 µg/cm2/week migration



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2.2.2. Phtalates.

None of the following phthalates shall be present in concentrations higher than indicated.

Phtalate(s)	CAS-nr	EU	US	Canada	Japan	Australia	required limit
DEHP DBP BBP	117-81-7 84-74-2 85-68-7	REACH Annex XVII par 51, SVHC list Food 2002/72/EC	CPSIA sect 108	SOR/2010- 298	Food sanitation law	Australian Consumer law (only DEHP)	< 0.1 % of each and sum < 0.1%, Food products only: BBP < 30 ppm, DEHP < 1.5 ppm, DBP < 0.3 ppm migration
DINP	28553-12-0 68515-48-0 26761-40-0	REACH Annex XVII par 52,	CPSIA sect 108	SOR/2010- 298	Food sanitation law		< 0.1 % of each and sum < 0.1%
DnOP	68515-49-1 117-84-0	Food 2002/72/EC					Food products only: DINP+DIDP < 9 ppm migration
DIBP DIHP DHNUP DMEP DIPP	84-69-5 68515-42-4 71888-89-6 117-82-8 605-50-5	SVHC list					< 0.1% of each
DnDP	84-77-5	Food 2002/72/EC					Food products only: DNDP+DNOP < 5 ppm migration
DnHP	84-75-3		California AB 1108				< 50 ppm
Any other phtalate							< 0.05%

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2.2.3. REACH, Toy specific.

Besides the requirements of par 2.1. that remain valid, market case studies and risk analysis have shown that for toys particular attention shall be paid to the following (this list is not exclusive)

- * Annex XVII, item 23 regarding cadmium in plastics, lacquers and colorants
- * Annex XVII, item 22 regarding pentachlorophenol in wooden components
- * SVHC list, Formaldehyde in recycled paper, in the paper coating or in wood
- * Annex XVII, item 43 for azocolourants in fabric
- * Annex XVII, item 27 regarding Nickel
- * Annex XVII, item 5, Benzene
- * SVHC list, HBCCD, regarding this flame retardant in plastics and fabric
- * Annex XVII, item 18, 19, 20, 31, and SVHC list, regarding other wood
- preservatives based on heavy metals or oil products
- * Annex XVII, item 42, chlorated alkanes for leather fattening
- 2.2.4. Polycyclic Aromatic Hydrocarbons (PAH).

None of these shall be present above the limits set out in the requirements for the testing for PAH in the frame of the award of a GS-mark as specification according to § 21, subsection 1 no. 3 of the German Product Safety Act. Cartamundi does not accept components, substances or mixtures that have

concentrations above those specified in category 2 of the requirements. If concentrations are present at levels specified in category 1, Cartamundi will not accept these products unless it has given prior written permission.

We require compliance to the European PAH regulation No. 1272/2013 with the limit for toys (0,5 mg/kg).

2.2.5. DMF (Dimethylfumarate)

DMF (directive 2009/251/EC) is not allowed in any component, substance or mixture, nor in products accompanying the goods like e.g. silica bags.

2.2.6. Bisphenol A.

Bisphenol A shall not be present in any component, substance or mixture according to EN 71-9 and 2011/8/EU



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2.2.7. RohS.

Although card games do not fall under electric toys, Cartamundi games can be used as part of an electric game and as such must be compliant to RohS 2012/19/EC and 2002/95/EC. As such they shall never contain any of the listed forbidden substances.

Date:

Product Integrity Responsible:

Company stamp:



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