

Diapers and diaper components: HMTc Standard

Karen Pendergrass · ORCID 0000-0002-2348-7259 · 1.0 (2026-08-10)

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<https://heavymetalcertified.com/standards/diapers-and-components>. Retrieved 2026-09-27.

How every number on this page is set

WHAT THIS STANDARD COVERS

Covers the diaper and its structural components: nonwoven topsheet and backsheet, the absorbent core, elastics, adhesives, and closures/fasteners. It does NOT cover baby or diaper wipes, or diaper creams, which are leave-on skin-cleansing and skin-care products certified under Category 2 (Infant and Child Personal Care), rows Baby wipes and Diaper cream.

Diapers and diaper components is a contact product, not a food. Its heavy-metal limits are extractable-metal limits for the skin-contact textile and elastic components ([EU REACH Annex XVII entry 72](#)). Entry 72 excludes disposable textiles, so the limits bind reusable-cloth components directly and are read across as the benchmark for disposable-diaper skin-contact components; the absorbent core has no metal-migration pathway: not dietary maximum levels. The standard for each analyte is the strictest limit set by any credible government regulator for this product in its own basis: a lookup of sovereign law, with the measured quantity stated on every row. Where no instrument directly governs the exact product form: a pacifier is excluded from the [Toy Safety Directive](#), a disposable diaper from the REACH textile restriction: the limit is read across from the nearest applicable sovereign limit and labelled as a read-across, never asserted as direct governance. Migration limits (what leaves the article into saliva or food) and total-content limits (how much metal the article contains) are different quantities measured by different methods; they are published as separate ceilings and never combined into one number. A certified product meets every applicable limit at once, each on a like-for-like basis.

[Inorganic arsenic](#) and [methylmercury](#) are not published for this category: they are ingestion-and-bioaccumulation speciation forms with no migration counterpart in a contact article, and the total-element ceilings (total arsenic, total mercury) bound them. Where a cell is marked not material, no regulator sets a limit and no exposure pathway exists; the determination is recorded, not left blank.

Master Limit Table

Limits in mg/kg, in the basis named on each row. "ND" means not detectable at the regulation's stated detection limit: the strictest possible ceiling. Sub-rows (↳) are companion ceilings in a different basis that also apply. Every claim analyte is equal at the gate. A product is certified only when every analyte

is at or below 100% of its published government floor or disclosed read-across; above the limit, on any metal, it is not certified and carries no mark. Antimony is regulated in the toy-migration instruments and screened, but is not one of the ten HMTc certification analytes.

ANALYTE	HMTc LIMIT	BASIS	STRICTEST GOVERNMENT	RATIONALE
Lead (Pb)	1	homogeneous material after extraction; source unit mg/kg	European Union (read-across)	regulatory-alignment
Arsenic, total (tAs)	1	homogeneous material after extraction; source unit mg/kg	European Union (read-across)	regulatory-alignment
Cadmium (Cd)	1	homogeneous material after extraction; source unit mg/kg	European Union (read-across)	regulatory-alignment
Nickel (Ni)	0.5 µg/cm ² /week	nickel release, direct and prolonged skin contact (EN 1811)	EU	regulatory-alignment
Chromium VI (Cr-VI)	1	homogeneous material after extraction; source unit mg/kg	European Union (read-across)	regulatory-alignment
Tin (Sn)	1000	organotin content as tin, skin-contact article (REACH Annex XVII entry 2012 ; 0.1% = 1000 mg/kg). Reflex organotin speciation on a total-tin detection; ratchets toward the TDI-anchored voluntary levels (Smajgl 2015: up to 23 mg/kg total Sn, 20-100% of the organotin TDI)	European Union	regulatory-alignment

Screened, not limited

All ten HMTc certification analytes, plus a total-chromium screen, are accounted for. The analytes below carry no published ceiling for this product because no exposure pathway and no government limit exist; each determination is recorded here rather than left as a silent gap. They are screened during certification, not certified against a number.

ANALYTE	WHY IT CARRIES NO CEILING FOR THIS PRODUCT
Inorganic arsenic (iAs)	REACH textile limits regulate total arsenic; no inorganic-arsenic limit. Bounded by the tAs extraction ceiling.
Mercury, total (tHg)	No mercury source or migration pathway in absorbent-hygiene materials (cellulose fluff, super-absorbent polymer, PE/PP nonwoven). No jurisdiction sets a diaper mercury limit.
Methylmercury (MeHg)	No methylmercury pathway in a diaper.
Aluminium (Al)	No aluminium source or migration pathway in absorbent-hygiene materials.
Chromium, total (Cr)	EU REACH Annex XVII entry 72 regulates extractable hexavalent chromium in skin-contact textiles (Cr-VI, 1 mg/kg after extraction); no jurisdiction sets a total-chromium extraction limit for skin-contact textile or absorbent-hygiene materials, so no sovereign total-Cr row applies to the diaper form. Total chromium is screened, not assigned a published limit; any detectable total chromium reflexes to Cr-VI extraction, which binds at the entry-72 limit read across per the disposable-textile exclusion.

Derivation: every government value, side by side

Each row lists every government limit weighed for this analyte in the governing basis, converted to mg/kg; the HMTc limit is the strictest of them. Companion total-content ceilings appear in the Master Limit Table above, not here, because they are a different measured quantity.

ANALYTE	GOVERNMENT LIMITS CONSIDERED (MG/KG)	HMTc	BINDS
Lead (Pb)	European Union 1 (read-across)	1	European Union (read-across)
Arsenic, total (tAs)	European Union 1 (read-across)	1	European Union (read-across)
Cadmium (Cd)	European Union 1 (read-across)	1	European Union (read-across)
Nickel (Ni)		0.5 µg/cm ² /week	EU
Chromium, total (Cr)		—	
Chromium VI (Cr-VI)	European Union 1 (read-across)	1	European Union (read-across)
Tin (Sn)	European Union 1000 · European Union 1000	1000	European Union

Cite this standard

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The evidence each limit is applied to lives on the independent [Heavy Metal Index](#)^[2]; HMTc cites it one way and never the reverse. HMTc standards are living, versioned documents; this page reflects 1.0 (2026-08-10).

Source regulations

Every government regulation weighed to set this standard, evaluated against each other in the correct basis. The strictest applicable limit binds each analyte; basis is never conflated across families.

#	Regulation	Instrument	Basis	Role in this standard
1	EU REACH entry 72 (metals in consumer textiles) ^[2]	Extraction limit	skin-contact extraction	Binds one or more migration/extraction limits
2	European Commission ^[2]	Content limit	total content	Companion total-content ceiling