

Pet toppers, mixers & broths: HMTc Standard

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CORRESPONDENCE

Corrections are logged publicly on the article page, each with its date, the affected value, and the source that resolved it.

Abstract

The Heavy Metal Tested & Certified human-grade standard for pet toppers, mixers & broths, stated as consumed. Pet food is legally feed; HMTc voluntarily certifies each analyte to the strictest human-food sovereign maximum for the nearest analog, with the laxer feed-law floor disclosed for contrast.

1 | How every number on this standard is set

Pet food is legally governed by feed law — EU Directive 2002/32/EC on undesirable substances in animal feed, FDA Center for Veterinary Medicine guidance, and AAFCO model regulations — whose maximum levels are generally laxer than the corresponding human-food limits. Japan (FAMIC pet-food standard) and China (draft pet-food guidance) set enforced or proposed pet-food maxima in the same lax range. The HMTc standard for each analyte is not the feed limit: it is the strictest applicable human-food sovereign maximum for the nearest human-food analog, adopted as a voluntary human-grade over-compliance. The feed floor is disclosed on every row and never selects the number.

2 | Master limit table

All values in ppb (µg/kg), as consumed basis. A brand meeting every value qualifies for the mark.

ANALYTE	TIER	HMTc LIMIT	BASIS
Lead (Pb)	Tier 1	100	human-grade read-across (Australia / New Zealand)

Cadmium (Cd)	Tier 1	50	human-grade read-across (European Union)
Total arsenic (tAs)	Tier 2	100	human-grade read-across (India)
Inorganic arsenic (iAs)	Tier 1	20	human-grade read-across (Israel)
Mercury, total (tHg)	Tier 1	50	human-grade read-across (Hong Kong)
Methylmercury (MeHg)	Tier 1	≤ tHg	bounded by tHg (reflex speciation)
Nickel (Ni)	Tier 2	800	human-grade read-across (European Union)
Tin (Sn)	Tier 2	200,000	human-grade read-across (European Union)
Aluminium (Al)	Tier 2	100,000	human-grade read-across (China)
Total chromium (Cr)	Tier 2	1,000	human-grade read-across (Hong Kong)
Hexavalent chromium (Cr-VI)	Tier 2	≤ Cr	bounded by Cr (reflex speciation)

3 | Derivation – where each number comes from

Every cell traces to one named sovereign maximum level (the strictest for the nearest analog), or to an explicit control, not-material, or species-bounded determination. No occurrence statistic selects a certification value.

ANALYTE	HMTC	SOVEREIGN ANALOG / DETERMINATION
Lead (Pb)	100	Australia / New Zealand — meat of cattle, sheep, pig, and poultry, excluding offal
Cadmium (Cd)	50	European Union — meat of bovine animals, sheep, pig, and poultry
Total arsenic (tAs)	100	India — Named animal fats (lard, rendered pork fat, premier jus and edible tallow)
Inorganic arsenic (iAs)	20	Israel — Meat and meat products, including poultry and game, except listed categories

Mercury, total (tHg)	50	Hong Kong — Meat of animal
Methylmercury (MeHg)	≤ tHg	MeHg carries no product-specific sovereign cell; it is a component of and bounded by its parent total tHg (MeHg ≤ tHg), an enforceable ceiling via reflex speciation rather than an empty cell.
Nickel (Ni)	800	European Union — human-food analog
Tin (Sn)	200,000	European Union — human-food analog
Aluminium (Al)	100,000	China — human-food analog
Total chromium (Cr)	1,000	Hong Kong — Meat of animal
Hexavalent chromium (Cr-VI)	≤ Cr	Cr-VI carries no product-specific sovereign cell; it is a component of and bounded by its parent total Cr (Cr-VI ≤ Cr), an enforceable ceiling via reflex speciation rather than an empty cell.

4 | Cite this standard

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References

- [1] Australia / New Zealand — human-food maximum levels
Binds Pb. Strictest applicable human-food sovereign maximum for the nearest analog.
MAXIMUM LEVEL
- [2] China — human-food maximum levels
Binds Al. Strictest applicable human-food sovereign maximum for the nearest analog.
MAXIMUM LEVEL
- [3] European Union — human-food maximum levels
Binds Cd, Ni, Sn. Strictest applicable human-food sovereign maximum for the nearest analog.
MAXIMUM LEVEL
- [4] Hong Kong — human-food maximum levels
Binds tHg, Cr. Strictest applicable human-food sovereign maximum for the nearest analog.
MAXIMUM LEVEL
- [5] Israel — human-food maximum levels
Binds iAs. Strictest applicable human-food sovereign maximum for the nearest analog.
MAXIMUM LEVEL

[6] India — human-food maximum levels

Binds tAs. Strictest applicable human-food sovereign maximum for the nearest analog.

MAXIMUM LEVEL

STATUS AND LICENCE

A normative certification standard, editorially reviewed and version-controlled in-house; every value traces to a named sovereign maximum level, disclosed in the derivation. © 2026 Institute of Contaminant Standards / Heavy Metal Certified. All rights reserved.

DATA AVAILABILITY

The works this reference draws on are listed in full in the references above and on the briefing page at <https://heavymetalcertified.com/standards/pet-toppers-mixers-broths>. Primary legal instruments and expert-body assessments are named with their public identifiers; the underlying occurrence and toxicology corpus is maintained on the Heavy Metal Index.

COMPETING INTERESTS

This briefing is published by the Heavy Metal Tested & Certified (HMTc) program, operated by the Institute of Contaminant Standards. Its statements about government regulations, toxicology, and occurrence are sourced to the cited primary and expert-body records and to the independently maintained Heavy Metal Index; the program's own certification thresholds are not used as evidence for any factual claim made here.

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