Cephalopods (octopus, squid, cuttlefish): HMTc Standard

Karen Pendergrass · 0000-0002-2348-7259 · Heavy Metal Tested & Certified, Institute of Contaminant Standards

CITE AS

Pendergrass, K. (2026). Cephalopods (octopus, squid, cuttlefish): HMTc Standard (Standard No. 10.83138/hmtc.std.6.cephalopods). Institute of Contaminant Standards. https://doi.org/10.83138/hmtc.std.6.cephalopods

© 2026 Institute of Contaminant Standards / Heavy Metal Certified. All rights reserved.

CORRESPONDENCE

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

KEYWORDS

heavy metals, food safety, dietary exposure

PUBLICATION HISTORY

This revision 2026-08.

Abstract

The Heavy Metal Tested & Certified standard for cephalopods — octopus, squid, cuttlefish — not canned, stated as consumed. Cephalopods carry the strictest inorganic-arsenic ceiling in all of seafood (EU 2025/1891, 50 ppb); every limit is the strictest maximum level any credible government sets for the product, with a disclosed read-across for methylmercury where none regulates it.

1 | How every number on this standard is set

HMTc Method v2.0 (government-limit default, 8:1 basis, read-across)

2 | Master limit table

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

ANALYTE	HMTC LIMIT	BASIS
Lead (Pb)	300	government maximum level (EU 2023/915)
Cadmium (Cd)	1,000	government maximum level (EU 2023/915)

Total arsenic (tAs)	1,000	government maximum level (Paraguay)
Inorganic arsenic (iAs)	50	government maximum level (European Union)
Mercury, total (tHg)	300	government maximum level (EU 2023/915)
Methylmercury (MeHg)	≤ tHg	bounded by tHg (reflex speciation)
Nickel (Ni)	2,000	read-across (EU 2024/1987)
Tin (Sn)	200,000	read-across (EU 2023/915)
Aluminium (Al)	100,000	read-across (China)
Total chromium (Cr)	12,000	government maximum level (India)
Hexavalent chromium (Cr-VI)	10	read-across (CA SWRCB)

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)	300	government maximum level (EU 2023/915)
Cadmium (Cd)	1,000	government maximum level (EU 2023/915)
Total arsenic (tAs)	1,000	government maximum level (Paraguay)
Inorganic arsenic (iAs)	50	government maximum level (European Union)
Mercury, total (tHg)	300	government maximum level (EU 2023/915)
Methylmercury (MeHg)	≤ tHg	bounded by tHg (reflex speciation)
Nickel (Ni)	2,000	read-across (EU 2024/1987)
Tin (Sn)	200,000	read-across (EU 2023/915)
Aluminium (Al)	100,000	read-across (China)
Total chromium (Cr)	12,000	government maximum level (India)
Hexavalent chromium (Cr-VI)	10	read-across (CA SWRCB)

4 | Cite this standard

Pendergrass, K. (2026). *Cephalopods (octopus, squid, cuttlefish): HMTc standard* (Standard No. 10.83138/hmtc.std.6.cephalopods). Institute of Contaminant Standards. https://doi.org/10.83138/hmtc.std.6.cephalopods

© 2026 Institute of Contaminant Standards / Heavy Metal Certified. All rights reserved.

References

[1] EU 2023/915
Binds Pb, Cd, tHg, Sn.
MAXIMUM LEVEL

[2] Paraguay
Binds tAs.
MAXIMUM LEVEL

[3] EU 2024/1987
Binds Ni.
READ-ACROSS

[4] India
Binds Cr.
MAXIMUM LEVEL

[5] CA SWRCB
Binds Cr-VI.
READ-ACROSS

[6] China
Binds Al.
READ-ACROSS

[7] European Union
Binds iAs.
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.

COMPETING INTERESTS

This standard 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.

DATA AVAILABILITY

The works this standard draws on are listed in full in the references above and on the standard page at https://heavymetalcertified.com/standards/cephalopods. Primary legal instruments and expert-body assessments are

PUBLICATION HISTORY

This revision 2026-08. The full dated record is maintained at https://heavymetalcertified.com/standards/cephalopods.

named with their public identifiers; the underlying occurrence and toxicology corpus is maintained on the Heavy Metal Index.