Fish sauce (fermented anchovy/marine sauce): 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.

KEYWORDS

heavy metals, food safety, dietary exposure

PUBLICATION HISTORY

This revision 2026-08.

Abstract

The Heavy Metal Tested & Certified standard for Fish sauce (fermented anchovy/marine sauce) (Condiments, Sauces and Dressings), stated as consumed. Each analyte carries the strictest applicable government maximum level in the product's native basis, with a disclosed read-across or a mandatory control where no government regulates the exact product.

1 | How every number on this standard is set

HMTc Method v2.0 (government-limit default; face value, no reconstitution; read-across / control / not-material for unregulated cells; no occurrence percentiles)

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	read-across (EU 2023/915)
Cadmium (Cd)	50	read-across (CR)
Total arsenic (tAs)	2,000	read-across (Australia / New Zealand)

Inorganic arsenic (iAs)	100	read-across (European Union)
Mercury, total (tHg)	300	read-across (EU 2023/915)
Methylmercury (MeHg)	≤ tHg	bounded by tHg (reflex speciation)
Nickel (Ni)	20	read-across (European Union)
Tin (Sn)	100,000	read-across (EU 2023/915)
Aluminium (Al)	200	read-across (European Union)
Total chromium (Cr)	50	read-across (AU)
Hexavalent chromium (Cr-VI)	≤ 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)	300	read-across (EU 2023/915); muscle meat of fish, general
Cadmium (Cd)	50	read-across (CR); fish in general, except sardine, eel, and swordfish
Total arsenic (tAs)	2,000	read-across (Australia / New Zealand); fish
Inorganic arsenic (iAs)	100	read-across (European Union); muscle meat of fish, species other than those listed under Annex I 3.4.5.2
Mercury, total (tHg)	300	read-across (EU 2023/915); listed lower-mercury fish and cephalopods/marine gastropods, including cod, herring, mackerel, salmon/trout species listed, sardine/pilchard, sole, whiting, and others
Methylmercury (MeHg)	≤ tHg	bounded by tHg (reflex speciation)
Nickel (Ni)	20	read-across (European Union); water intended for human consumption

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Tin (Sn)	100,000	read-across (EU 2023/915); canned beverages, including canned fruit and vegetable juices, except canned dried and canned powdered products
Aluminium (Al)	200	read-across (European Union); water intended for human consumption
Total chromium (Cr)	50	read-across (AU); drinking water
Hexavalent chromium (Cr-VI)	≤ Cr	bounded by Cr (reflex speciation)

4 | Cite this standard

Pendergrass, K. (2026). *Fish sauce (fermented anchovy/marine sauce): HMTc standard* (Standard No. 10.83138/hmtc.std.32.fish-sauce). Institute of Contaminant Standards. https://doi.org/10.83138/hmtc.std.32.fish-sauce

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References

[1] EU 2023/915
Binds Pb, tHg, Sn. muscle meat of fish, general.
READ-ACROSS

[2] CR
Binds Cd. fish in general, except sardine, eel, and swordfish.
READ-ACROSS

[3] Australia / New Zealand
Binds tAs. fish.
READ-ACROSS

[4] European Union
Binds Ni, Al, iAs. water intended for human consumption.
READ-ACROSS

[5] AU
Binds Cr. drinking water.
READ-ACROSS

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.

PUBLICATION HISTORY

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

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/fish-sauce. 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.