

CHEMICAL REFERENCE CRITERIA FOR EXPORTED FROZEN FISHERY PRODUCTS OF THAILAND (สิทธิพิเศษ)

Item	Bivalve Mollusc	Cephalopod (without viscera)	Cephalopod (whole or with viscera or ink sac)	Wild caught Crab	Aquaculture Crab	Crocodile	Wild caught Fish	Histamine poisoning fish (รวม Tuna loin)	Aquaculture fish/ Salmon	Aquaculture fish fillet	Wild caught fish fillet	Surimi / Surimi based and / or mix with aquaculture fishery products	Lobster	Aquaculture shrimp	Wild caught shrimp	Snapping turtle	Seafood mix	Seafood mix with Aquaculture fishery products	Seaweed
Hist (µg/g)								100 (EU, Vie n=9, c=2 m=100, M=200)				100 ^V							
Biototoxin * (µg/g) :																			
- PSP	0.8																		
- ASP	20																		
- Sum of DSP and PTX	0.16																		
- YTX	3.75																		
- AZA	0.16																		
Hg (µg/g)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5 ^E 1.0 ^F	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Cd (µg/g)	1.0	1.0	2.0	0.5	0.5		0.05	0.05 ^B 0.10 ^C 0.25 ^D	0.05	0.05	0.05	0.05	0.5	0.5	0.5		1.0	1.0	0.3
Pb (µg/g)	1.5	1.0	1.0	0.5	0.5	1.0	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.5		1.0	1.0	1.0
P ₂ O ₅ (%)				0.5	0.5					0.5	0.5	0.5	0.5	0.5	0.5				
SO ₂ (µg/g)				Uncook = 100 Cook = 30	Uncook = 100 Cook = 30								Uncook = 100 Cook = 30	Uncook = 100 Cook = 30	Uncook = 100 Cook = 30				50
TC group (µg/g) (A) :																			
- OTC									0.1	0.1				0.1				0.1	
- TTC									0.1	0.1				0.1				0.1	
- CTC									0.1	0.1				0.1				0.1	
CAP (µg/kg) (A)					0.3 (Can, Sin, Mal, Chi, Kor, Vie 0.1) (Cos 0.11) (USA 0.15)				0.3 (Can, Sin, Mal, Chi, Kor, Vie 0.1) (Cos 0.11) (USA 0.15)	0.3 (Can, Sin, Mal, Chi, Kor, Vie 0.1) (Cos 0.11) (USA 0.15)				0.3 (Can, Sin, Mal, Chi, Kor, Vie 0.1) (Cos 0.11) (USA 0.15)				0.3 (Can, Sin, Mal, Chi, Kor, Vie 0.1) (Cos 0.11) (USA 0.15)	

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NF group (µg/kg) (A) :					1.0 (Can, Kor, Vie, Chi, Sin, Mal 0.1) (Cos 0.35) (USA 0.5)				1.0 (Can, Kor, Vie, Chi, Sin, Mal 0.1) (Cos 0.35) (USA 0.5)	1.0 (Can, Kor, Vie, Chi, Sin, Mal 0.1) (Cos 0.35) (USA 0.5)		1.0 (Can, Kor, Vie, Chi, Sin, Mal 0.1) (Cos 0.35) (USA 0.5)		1.0 (Can, Kor, Vie, Chi, Sin, Mal 0.1) (Cos 0.35) (USA 0.5)				1.0 (Can, Kor, Vie, Chi, Sin, Mal 0.1) (Cos 0.35) (USA 0.5)	
					1.0 (Can, Kor, Vie, Chi, Sin, Mal 0.1) (Cos 0.41) (USA 0.5)				1.0 (Can, Kor, Vie, Chi, Sin, Mal 0.1) (Cos 0.41) (USA 0.5)	1.0 (Can, Kor, Vie, Chi, Sin, Mal 0.1) (Cos 0.41) (USA 0.5)		1.0 (Can, Kor, Vie, Chi, Sin, Mal 0.1) (Cos 0.41) (USA 0.5)		1.0 (Can, Kor, Vie, Chi, Sin, Mal 0.1) (Cos 0.41) (USA 0.5)				1.0 (Can, Kor, Vie, Chi, Sin, Mal 0.1) (Cos 0.41) (USA 0.5)	
					1.0 (Can, Kor, Vie, Chi, Sin, Mal 0.1) (Cos 0.3) (USA 0.5)				1.0 (Can, Kor, Vie, Chi, Sin, Mal 0.1) (Cos 0.3) (USA 0.5)	1.0 (Can, Kor, Vie, Chi, Sin, Mal 0.1) (Cos 0.3) (USA 0.5)		1.0 (Can, Kor, Vie, Chi, Sin, Mal 0.1) (Cos 0.3) (USA 0.5)		1.0 (Can, Kor, Vie, Chi, Sin, Mal 0.1) (Cos 0.3) (USA 0.5)				1.0 (Can, Kor, Vie, Chi, Sin, Mal 0.1) (Cos 0.3) (USA 0.5)	
					1.0 (Can, Kor, Vie, Chi, Sin, Mal 0.1) (Cos 0.24) (USA 0.5)				1.0 (Can, Kor, Vie, Chi, Sin, Mal 0.1) (Cos 0.24) (USA 0.5)	1.0 (Can, Kor, Vie, Chi, Sin, Mal 0.1) (Cos 0.24) (USA 0.5)		1.0 (Can, Kor, Vie, Chi, Sin, Mal 0.1) (Cos 0.24) (USA 0.5)		1.0 (Can, Kor, Vie, Chi, Sin, Mal 0.1) (Cos 0.24) (USA 0.5)				1.0 (Can, Kor, Vie, Chi, Sin, Mal 0.1) (Cos 0.24) (USA 0.5)	
Sum of MG and LMG (µg/kg) (A)					2.0 (Cos 0.17) (Can, USA 0.5) (Kor, Vie 0.1)				2.0 (Cos 0.17) (Aus&New, Can, USA 0.5) (Kor, Vie 0.1)	2.0 (Cos 0.17) (Aus&New, Can, USA 0.5) (Kor, Vie 0.1)				2.0 (Cos 0.17) (Can, USA 0.5) (Kor, Vie 0.1)		0.1		2.0 (Cos 0.17) (Can, USA 0.5) (Kor, Vie 0.1)	

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FQ group (µg/kg) (A) :																			
- Dan					100 (Can 1.0) (USA 5.0) (Jan, Vie 10)				100 (Can 1.0) (USA 5.0) (Jan, Vie 10)	100 (Can 1.0) (USA 5.0) (Jan, Vie 10)				100 (Can 1.0) (USA 5.0) (Jan, Vie 10)				100 (Can 1.0) (USA 5.0) (Jan, Vie 10)	
- Sum of Enr and Cip					100 (Can 1.0) (USA 5.0) (Aus&New, Vie 10)				100 (Can 1.0) (USA 5.0) (Aus&New, Vie 10)	100 (Can 1.0) (USA 5.0) (Aus&New, Vie 10)				100 (Can 1.0) (USA 5.0) (Aus&New, Vie 10)				100 (Can 1.0) (USA 5.0) (Aus&New, Vie 10)	
- Dif					300 (Can 1.0) (USA 5.0) (Vie 10)				300 (Can 1.0) (USA 5.0) (Vie 10)	300 (Can 1.0) (USA 5.0) (Vie 10)				300 (Can 1.0) (USA 5.0) (Vie 10)				300 (Can 1.0) (USA 5.0) (Vie 10)	
- Sar					100 (Can 1.0) (Cos 2.9) (USA 5.0) (Aus&New, Vie 10)				100 (Can 1.0) (Cos 30) (USA 5.0) (Aus&New, Vie 10)	100 (Can 1.0) (Cos 30) (USA 5.0) (Aus&New, Vie 10)				100 (Can 1.0) (Cos 2.9) (USA 5.0) (Aus&New, Vie 10)				100 (Can 1.0) (Cos 2.9) (USA 5.0) (Aus&New, Vie 10)	
- Nor					10 (Cos 0.57) (Can 1.0) (Kor, USA 5.0) (Aus&New, Vie 10)				10 (Cos 0.57) (Can 1.0) (Kor, USA 5.0) (Aus&New, Vie 10)	10 (Cos 0.57) (Can 1.0) (Kor, USA 5.0) (Aus&New, Vie 10)				10 (Cos 0.57) (Can 1.0) (Kor, USA 5.0) (Aus&New, Vie 10)				10 (Cos 0.57) (Can 1.0) (Kor, USA 5.0) (Aus&New, Vie 10)	
QL group (µg/kg) (A) :																			
- Flu					200 (Can 5.0) (USA 10)				600 (Aus&New, Can 5.0) (USA 10)	600 (Aus&New, Can 5.0) (USA 10)				200 (Can 5.0) (USA 10)				600 ¹ 200 ² (Can 5.0) (USA 10)	
- Oxo									20	20				20				20	
Sor (µg/g)																			500

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Remarks :

* = test in raw material (edible tissue)

C = tuna and scomber species

G = Bivalve Mollusc

I = Fish

A = Aquaculture

D = *Sardina pilchadus*

H = Cephalopod

J = Shrimp

B = all histamine poisoning fish except fish in C and D

E = all fish except fish in F

V = surimi ที่มาจากปลาที่สร้าง Histamine

F =	anglerfish (<i>Lophius species</i>)	megrim (<i>Lepidorhombus species</i>)	sail fish (<i>Istiophorus platypterus</i>)
	atlantic catfish (<i>Anarhichas lupus</i>)	mullet (<i>Mullus species</i>)	scabbard fish (<i>Lepidopus caudatus, Aphanopus carbo</i>)
	bonito (<i>Sarda sarda</i>)	pike (<i>Esox lucius</i>)	seabream, pandora (<i>Pagellus species</i>)
	eel (<i>Anguilla species</i>)	plain bonito (<i>Orcynopsis unicolor</i>)	shark (all species)
	emperor, orange roughy, rosy soldierfish (<i>Hoplostethus species</i>)	poor cod (<i>Tricopterus minutes</i>)	snake mackerel or butterfish (<i>Lepidocybium flavobrunneum, Ruvettus pretiosus, Gempylus serpens</i>)
	grenadier (<i>Coryphaenoides rupestris</i>)	portuguese dogfish (<i>Centroscymnus coelolepis</i>)	sturgeon (<i>Acipenser species</i>)
	halibut (<i>Hippoglossus hippoglossus</i>)	rays (<i>Raja species</i>)	
	marlin (<i>Makaira species</i>)	redfish (<i>Sebastes marinus, S. mentella, S. viviparus</i>)	
	tuna (<i>Thunnus species, Euthynnus species, Katsuwonus pelamis</i>)	swordfish (<i>Xiphias gladius</i>)	

หมายเหตุ : มาตรฐานฟอสเฟตในรูปของ P₂O₅ กำหนดมาจากมาตรฐานฟอสเฟตในรูปของ P x 2.2903

Histamine analysis :

c = number of sample units giving values between m and M, total number of the samples giving the value between m and M which exceeds c is considered unsatisfactory

n = number of units comprising the sample

m = limit below which all results are considered satisfactory

M = acceptability limit beyond which the results are considered unsatisfactory