

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

Item	Dried/ Smoked histamine poisoning fish	Dried Mollusc	Dried Cephalopod	Dried Crocodile	Dried/ Smoked aquaculture fish (except histamine poisoning fish)	Dried/ Smoked wild caught fish (except histamine poisoning fish)	Dried shrimp/ Instant rice porridge with dried shrimp	Fermented crab	Fermented fish	Fish roe products	Tai-Pla, Budoo	Fish sauce	Fish sauce powder	Oyster sauce	Salted mackerel	Seasoning sauce	Shrimp paste	Shrimp powder with chili	Shrimp/ crab paste with soybean oil	Fish powder with chili, Fish paste	Chili paste and Fish paste with soybean oil	Salted Jelly fish	Dried algae	
Hist (µg/g)	100 (EU, Vie n = 9, c = 2 m = 100, M = 200)											400	400		100 (Vie n = 9, c = 2, m = 100, M = 200) (EU n = 9, c = 2, m = 200, M = 400)	200 ^J								
Biotoin * (µg/g) :																								
- PSP		0.8												0.8										
- ASP		20												20										
- Sum of DSP and PTX		0.16												0.16										
- YTX		3.75												3.75										
- AZA		0.16												0.16										
Hg (µg/g)	0.5 ^H 1.0 ^I	0.5	0.5	0.5	0.5	0.5 ^H 1.0 ^I	0.5	0.5	0.5	0.5 ^H 1.0 ^I	0.5			0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Cd (µg/g)	0.05 ^{(E)(W)} 0.10 ^{(F)(W)} 0.25 ^{(G)(W)}	1.0 ^W	1.0 ^W		0.05 ^W	0.05 ^W	0.5 ^W	0.5	0.05	0.05	0.05			0.1		0.5	0.5	0.5	0.05	0.1	2.0	0.3 ^W		
Pb (µg/g)	0.3	1.0	1.0	1.0	0.3	0.3	0.5	0.5	0.3	0.3	0.3			0.3		0.5	0.5	0.5	0.3	0.3	0.5	1.0		
Salt (%)												≥ 20			≥ 10		≥ 20					≥ 20		
pH														≤ 4.6 ^K	≤ 4.6			≤ 4.6 ^C		≤ 4.6 ^C				
TN (g/L)												≥ 4.0	≥ 4.0											
Sor (µg/g)			1500																				500	

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Sum of Ben and Sor (µg/g)	200				200	200		2000	2000	2000	2000			2000	200		200		2000		2000			
3-MCPD (µg/g)														0.02										
Aw (B)	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7							< 0.85 ^L	< 0.85			< 0.7	< 0.85 ^D	< 0.7	< 0.85 ^D		< 0.6	
CAP (µg/kg) (A)					0.3 (Can, Sin, Kor, Vie 0.1) (Cos 0.11) (USA 0.15)		0.3 (Can, Sin, Kor, Mal 0.1) (Cos 0.11) (USA 0.15)		0.3 (Can, Sin, Kor, Vie 0.1) (Cos 0.11) (USA 0.15)									0.3 (Kor, Mal 0.1) (Cos 0.11) (USA 0.15)	0.3 (Kor, Mal 0.1) (Cos 0.11) (USA 0.15)	0.3 (Kor, Vie 0.1) (Cos 0.11) (USA 0.15)	0.3 (Kor, Vie 0.1) (Cos 0.11) (USA 0.15)			
NF group (µg/kg) (A) :																								
- AOZ					1.0 (Can, Kor, Sin, Vie 0.1) (Cos 0.35) (USA 0.5)		1.0 (Can, Kor, Sin, Mal 0.1) (Cos 0.35) (USA 0.5)		1.0 (Can, Kor, Sin, Vie 0.1) (Cos 0.35) (USA 0.5)										1.0 (Mal, Kor 0.1) (Cos 0.35) (USA 0.5)	1.0 (Mal, Kor 0.1) (Cos 0.35) (USA 0.5)	1.0 (Kor, Vie 0.1) (Cos 0.35) (USA 0.5)	1.0 (Kor, Vie 0.1) (Cos 0.35) (USA 0.5)		
- AMOZ					1.0 (Can, Kor, Sin, Vie 0.1) (Cos 0.41) (USA 0.5)		1.0 (Can, Kor, Sin, Mal 0.1) (Cos 0.41) (USA 0.5)		1.0 (Can, Kor, Sin, Vie 0.1) (Cos 0.41) (USA 0.5)										1.0 (Mal, Kor 0.1) (Cos 0.41) (USA 0.5)	1.0 (Mal, Kor 0.1) (Cos 0.41) (USA 0.5)	1.0 (Kor, Vie 0.1) (Cos 0.41) (USA 0.5)	1.0 (Kor, Vie 0.1) (Cos 0.41) (USA 0.5)		
- AHD					1.0 (Can, Kor, Sin, Vie 0.1) (Cos 0.3) (USA 0.5)		1.0 (Can, Kor, Sin, Mal 0.1) (Cos 0.3) (USA 0.5)		1.0 (Can, Kor, Sin, Vie 0.1) (Cos 0.3) (USA 0.5)										1.0 (Mal, Kor 0.1) (Cos 0.3) (USA 0.5)	1.0 (Mal, Kor 0.1) (Cos 0.3) (USA 0.5)	1.0 (Kor, Vie 0.1) (Cos 0.3) (USA 0.5)	1.0 (Kor, Vie 0.1) (Cos 0.3) (USA 0.5)		
- SEM					1.0 (Can, Kor, Sin, Vie 0.1) (Cos 0.24) (USA 0.5)		1.0 (Can, Kor, Sin, Mal 0.1) (Cos 0.24) (USA 0.5)		1.0 (Can, Kor, Sin, Vie 0.1) (Cos 0.24) (USA 0.5)										1.0 (Kor, Mal 0.1) (Cos 0.24) (USA 0.5)	1.0 (Kor, Mal 0.1) (Cos 0.24) (USA 0.5)	1.0 (Kor, Vie 0.1) (Cos 0.24) (USA 0.5)	1.0 (Kor, Vie 0.1) (Cos 0.24) (USA 0.5)		
Sum of MG and LMG (µg/kg) (A)					2.0 (Kor, Vie 0.1) (Cos 0.17) (Aus&New, Can, USA 0.5)		2.0 (Kor 0.1) (Cos 0.17) (Can, USA 0.5)		2.0 (Kor, Vie 0.1) (Cos 0.17) (Aus&New, Can, USA 0.5)										2.0 (Kor 0.1) (Cos 0.17) (USA 0.5)	2.0 (Kor 0.1) (Cos 0.17) (USA 0.5)	2.0 (Kor, Vie 0.1) (Cos 0.17) (USA 0.5)	2.0 (Kor, Vie 0.1) (Cos 0.17) (USA 0.5)		

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FQ group (µg/kg) (A) :																								
- Dan					100 (Can 1.0) (USA 5.0)	100 (Can 1.0) (USA 5.0)	100 (Can 1.0) (USA 5.0)		100 (Can 1.0) (USA 5.0)								100 (USA 5.0)	100 (USA 5.0)	100 (USA 5.0)	100 (USA 5.0)				
- Sum of Enr and Cip					100 (Can 1.0) (USA 5.0) (Aus&New 10)	100 (Can 1.0) (USA 5.0) (Aus&New 10)	100 (Can 1.0) (USA 5.0) (Aus&New 10)		100 (Can 1.0) (USA 5.0) (Aus&New 10)								100 (USA 5.0)	100 (USA 5.0)	100 (USA 5.0)	100 (USA 5.0)				
- Dif					300 (Can 1.0) (USA 5.0)	300 (Can 1.0) (USA 5.0)	300 (Can 1.0) (USA 5.0)		300 (Can 1.0) (USA 5.0)								300 (USA 5.0)	300 (USA 5.0)	300 (USA 5.0)	300 (USA 5.0)				
- Sar					30 (Can 1.0) (Cos 2.9) (USA 5.0) (Aus&New 10)	30 (Can 1.0) (Cos 2.9) (USA 5.0) (Aus&New 10)	30 (Can 1.0) (Cos 2.9) (USA 5.0) (Aus&New 10)		30 (Can 1.0) (Cos 2.9) (USA 5.0) (Aus&New 10)								30 (Cos 2.9) (USA 5.0)	30 (Cos 2.9) (USA 5.0)	30 (Cos 2.9) (USA 5.0)	30 (Cos 2.9) (USA 5.0)				
- Nor					10 (Cos 0.57) (Can 1.0) (USA 5.0)	10 (Cos 0.57) (Can 1.0) (USA 5.0)	10 (Cos 0.57) (Can 1.0) (USA 5.0)		10 (Cos 0.57) (Can 1.0) (USA 5.0)								10 (Cos 0.57) (USA 5.0)	10 (Cos 0.57) (USA 5.0)	10 (Cos 0.57) (USA 5.0)	10 (Cos 0.57) (USA 5.0)				
QL group (µg/kg) (A) :																								
- Flu					600 (Aus&New, Can 5.0) (USA 10)	200 (Can 5.0) (USA 10)	600 (Aus&New, Can 5.0) (USA 10)		600 (Aus&New, Can 5.0) (USA 10)									200 (USA 10)	200 (USA 10)	600 (USA 10)	600 (USA 10)			
- Oxo					20	20	20		20								20	20	20	20				
TC group (µg/g) (A) :																								
- OTC					0.1	0.1	0.1		0.1								0.1	0.1	0.1	0.1				
- TTC					0.1	0.1	0.1		0.1								0.1	0.1	0.1	0.1				
- CTC					0.1	0.1	0.1		0.1								0.1	0.1	0.1	0.1				
SO ₂ (µg/g)																							50	

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Remarks :

* = test in raw material (edible tissue)

A = Aquaculture

B = ตรวจ AW กรณีเก็บรักษาผลิตภัณฑ์ที่อุณหภูมิห้อง

C = กรณีควบคุม pH (ยกเว้นกรณีที่ควบคุม Aw และกรณีผ่านการ sterilization)

D = กรณีควบคุม Aw (ยกเว้นกรณีที่ควบคุม pH และกรณีผ่านการ sterilization)

E = all histamine poisoning fish except fish in F and G

F = tuna and mackerel

G = *Sardina pilchadus*, Anchovy, Sword fish

K = กรณีควบคุม pH (สำหรับ Oyster sauce)

L = กรณีควบคุม AW (สำหรับ Oyster sauce)

H = all fish (except fish in I)

J = Nam sauce

W = ผลิตภัณฑ์แห้ง ส่งออกประเทศ EU, Taiwan และ Korea ให้รายงาน Cd ในรูป wet weight

I = anglerfish (*Lophius species*)

atlantic catfish (*Anarhichas lupus*)

bonito (*Sarda sarda*)

eel (*Anguilla species*)

emperor, orange roughy, rosy soldierfish (*Hoplostethus species*)

grenadier (*Coryphaenoides rupestris*)

halibut (*Hippoglossus hippoglossus*)

marlin (*Makaira species*)

megrin (*Lepidorhombus species*)

pike (*Esox lucius*)

plain bonito (*Orcynopsis unicolor*)

poor cod (*Tricopterus minutes*)

portuguese dogfish (*Centroscymnus coelolepis*)

rays (*Raja species*)

redfish (*Sebastes marinus, S. mentella, S. viviparus*)

sail fish (*Istiophorus platypterus*)

scabbard fish (*Lepidopus caudatus, Aphanopus carbo*)

seabream, pandora (*Pagellus species*)

snake mackerel or butterfish (*Lepidocybium flavobrunneum,*

Ruvettus pretiosus, Gempylus serpens)

sturgeon (*Acipenser species*)

swordfish (*Xiphias gladius*)

tuna (*Thunnus species, Euthynnus species, Katsuwonus pelamis*)

mullet (*Mullus species*)

shark (all species)