

## CHEMICAL REFERENCE CRITERIA FOR FROZEN &amp; CANNED FISHERY PRODUCTS OF THAILAND EXPORTED TO EUROPEAN UNION AND NORWAY (lot by lot)

Item	Bivalve Mollusc		Cephalopod		Crab		Fish		Lobster		Seafood mix		Shrimp		Other	
	F	C	F	C	F	C	F	C	F	C	F	C	F	C	F	C
Hg (µg/g)	0.5	0.5	0.5	0.5	0.5	0.5	0.5 <sup>X</sup>	0.5 <sup>X</sup>	0.5		0.5	0.5	0.5	0.5	0.5	0.5
							1.0 <sup>Y</sup>	1.0 <sup>Y</sup>								
Cd (µg/g)	1.0	1.0	1.0	1.0	0.5	0.5	0.05 <sup>B</sup>	0.05 <sup>B</sup>	0.5		1.0	1.0	0.5	0.5		
							0.10 <sup>D</sup>	0.10 <sup>D</sup>								
							0.15 <sup>C</sup>	0.15 <sup>C</sup>								
							0.25 <sup>E</sup>	0.25 <sup>E</sup>								
Pb (µg/g)	1.5	1.5	0.3	0.3	0.5	0.5	0.3	0.3	0.5		0.3	0.3	0.5	0.5		
Hist (µg/g)							n=9, c=2 m=100, M=200 <sup>H</sup>									
P <sub>2</sub> O <sub>5</sub> (%)	0.5				0.5	0.1	0.1 <sup>G</sup>		0.5	0.1			0.5	0.1		
							0.5 <sup>I</sup>									
SO <sub>2</sub> (µg/g)			150 <sup>R</sup>		150 <sup>R</sup>				150 <sup>R</sup>				150 <sup>R</sup>			
			50 <sup>J</sup>		50 <sup>J</sup>		50 <sup>J</sup>		50 <sup>K</sup>							
							135 <sup>L</sup>									
CAP (µg/kg) (A)					0.3	0.3	0.3	0.3			XX	XX	0.3	0.3		
NF group (µg/kg) (A) :																
- AOZ					1.0	1.0	1.0	1.0					1.0	1.0		
- AMOZ					1.0	1.0	1.0	1.0					1.0	1.0		
- AHD					1.0	1.0	1.0	1.0					1.0	1.0		
- SEM					1.0	1.0	1.0	1.0					1.0	1.0		

## CHEMICAL REFERENCE CRITERIA FOR FROZEN &amp; CANNED FISHERY PRODUCTS OF THAILAND EXPORTED TO EUROPEAN UNION AND NORWAY (lot by lot)

Item	Bivalve Mollusc		Cephalopod		Crab		Fish		Lobster		Seafood mix		Shrimp		Other	
	F	C	F	C	F	C	F	C	F	C	F	C	F	C	F	C
Sum of MG and LMG (µg/kg) (A)					2.0	2.0	2.0	2.0			XX	XX	2.0	2.0		
QL group (µg/kg) (A) :																
- Flu					200	200	600	600					200	200		
- Oxo					100	100							100	100		
FQ group (µg/kg) (A) :																
- Dan					100	100							100	100		
- Sum of Enr and Cip					100	100							100	100		
- Dif					300	300							300	300		
- Sar							30 <sup>M</sup>	30 <sup>M</sup>								
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		
EDTA (µg/g)		75				75								75		
Biotoxin * (µg/g) :																
- PSP	0.8	0.8														
- ASP	20	20														
- Sum of DSP, DTX and PTX	0.16	0.16														
- YTX	3.75	3.75														
- AZA	0.16	0.16														

## CHEMICAL REFERENCE CRITERIA FOR FROZEN &amp; CANNED FISHERY PRODUCTS OF THAILAND EXPORTED TO EUROPEAN UNION AND NORWAY (lot by lot)

Item	Bivalve Mollusc		Cephalopod		Crab		Fish		Lobster		Seafood mix		Shrimp		Other	
	F	C	F	C	F	C	F	C	F	C	F	C	F	C	F	C
Sum of Ben and Sor (µg/g)	2000 <sup>J</sup>				2000 <sup>J</sup>		2000 <sup>J</sup>		2000 <sup>J</sup>				2000 <sup>J</sup>			
Ben (µg/g)	1000 <sup>J</sup>				1000 <sup>J</sup>				1000 <sup>J</sup>				1000 <sup>J</sup>			
													1500 <sup>N</sup>			

**EU Remarks:**

A = aquaculture

\* = test in raw material (edible tissue)

B = all fish except fish in C,D and E

C = bullet tuna (*Auxis* species)D = mackerel (*Scomber speci es*), tuna (*Thunnus species, Katsuwonus pelamis, Euthynnus species* ),  
bichique (*Sicyopterus lagocephalus*)E = anchovy (*Engraulis species* ), sword fish (*Xiphias gladius* ), sardine (*Sardina pilchardus* )

G = surimi

H = only in histamine poisoning fish

I = fish fillet and surimi based products

J = cooked

XX = ตรวจ Antibiotic (ได้แก่ TC, CAP, NF, FQ, QL, MG &amp; LMG) โดยพิจารณาค่ามาตรฐานตามชนิดสัตว์น้ำ (ถ้ามีการทดสอบรายการดังกล่าว)

K= all cooked shrimps except shrimp in L

L = cooked shrimps of the *Penaeidae* , *Solenoceridae* and *Aristaeidae* family

M = only salmon

N = cooked shrimps in brine

R = raw

X = all fish except fish in Y

## CHEMICAL REFERENCE CRITERIA FOR FROZEN &amp; CANNED FISHERY PRODUCTS OF THAILAND EXPORTED TO EUROPEAN UNION AND NORWAY (lot by lot)

Item	Bivalve Mollusc		Cephalopod		Crab		Fish		Lobster		Seafood mix		Shrimp		Other	
	F	C	F	C	F	C	F	C	F	C	F	C	F	C	F	C

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

**Histamine analysis :**

n = number of units comprising the sample

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

m = limit below which all results are considered satisfactory

M = acceptability limit beyond which the results are considered unsatisfactory