

PRODUCT INFORMATION SHEET

**Bonito (*Katsuwonus pelamis*), Cod Fish (*Gadus morhua*),
Rainbow Trout (*Oncorhynchus mykiss*), White Tiger Shrimp
(*Penaeus vannamei*) and one of the Cephalopods: Octopus
(*Octopus vulgaris*) or
Jumbo Squid (*Dosidicus gigas*)**

PT originated REFERENCE MATERIAL (RM)

Description of the RM

Name / Material of related PT	DLA ptAUS4 (2023) Seafood-Screening – 6 Samples qualitative: Bonito (<i>Katsuwonus pelamis</i>) , Cod Fish (<i>Gadus morhua</i>) , Rainbow Trout (<i>Oncorhynchus mykiss</i>) , White Tiger Shrimp (<i>Penaeus vannamei</i>) and one of the Cephalopods: Octopus (<i>Octopus vulgaris</i>) or Jumbo Squid (<i>Dosidicus gigas</i>) freeze-dried, 5 samples (10 g each) with only one of the indicated species, 6th sample (10 g) mixed sample of 3 species
Identifier / LOT	RM 2023-AUS4
Expiry date	February 2027
Matrix	Lyophilized seafood preparation in maltodextrin (The amounts of water losses were complemented to 100% by adding maltodextrin according to the literature values)
Physical description	Powder
Packaging / weight	Sealed foil pouche / 10 g
Storage conditions	2 - 10°C (dry and dark)
Name and address manufacturer	DLA - Proficiency Tests GmbH Hauptstr. 80, 23845 Oering, Germany Tel. ++49-(0)4532-9183358, Fax. ++49(0)4102-9944976 eMail. pt@dla-lvu.de , website. www.dla-lvu.de

Composition of Material

Ingredients	Samples 1 - 5	Sample 6 (mixed sample)
Maltodextrin	62-83 %	82%
Fish/Crustacean/molluscs contents (dry weight)*	17-38 %	18%
further Ingredients: silicon dioxide	-	< 0,05 %

* The crustaceans/fish/molluscs used were commercially available products (whole raw crustaceans/ whole raw fish or fish fillets (except bonito) and whole raw molluscs). The bonito were canned tuna fillets preserved in their own juice.

Contents (in % corresponding to total fresh weight) of the respective seafood species in the samples 1-6.

Ingredients *	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6 (mixed sample)
Bonito (<i>Katsuwonus pelamis</i>)	negative	positive (100%)	negative	negative	negative	negative
Cod Fish (<i>Gadus morhua</i>)	negative	negative	positive (100%)	negative	negative	positive (47%)
Rainbow Trout (<i>Oncorhynchus mykiss</i>)	negative	negative	negative	negative	positive (100%)	negative
White Tiger Shrimp (<i>Penaeus vannamei</i>)	positive (100%)	negative	negative	negative	negative	positive (5,9%)
Octopus (<i>Octopus vulgaris</i>)	negative	negative	negative	positive (100%)	negative	positive (47%)
Jumbo Squid (<i>Dosidicus gigas</i>)	negative	negative	negative	negative	negative	negative

* Seafood species contents of freeze-dried food items reconstituted with maltodextrin (see table 1) as indicated in the column of ingredients according gravimetric mixing.

Note: The metrological traceability of temperature, mass and volume during production of the PT samples is ensured by DAkkS-compliant calibrated reference materials.

Minimum Sample Size

A minimum sample size of 5 g is recommended for sample preparation.

The homogeneity tests were performed with sample sizes of 5 g (Microtracer analysis).

The mixture homogeneity before bottling was examined 10-fold by microtracer analysis. Homogeneity was sufficient with a probability of $\geq 25\%$ (excellent mixture) and a HorRat value in the range of acceptance (0,3 to 1,3). The slightly increased HorRat Value of sample 6 (1,4) was accepted, because the probability was $\geq 25\%$.

Reference Values

All reference values were derived from the related PT round (for more details see final report).

Reference Values qualitative consensus value **

DNA-based methods*	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6 (mixed sample)
Bonito (<i>Katsuwonus pelamis</i>)	negative	none (3 positive, 2 negative)	negative	negative	negative	negative
Cod Fish (<i>Gadus morhua</i>)	negative	negative	positive	negative	negative	positive
Rainbow Trout (<i>Oncorhynchus mykiss</i>)	negative	negative	none (2 positive, 4 negative)	negative	positive	negative
White Tiger Shrimp (<i>Pen- aeus vannamei</i>)	positive	negative	negative	negative	negative	positive
Octopus (<i>Octopus vulgaris</i>)	negative	negative	negative	positive	negative	positive
Jumbo Squid (<i>Dosidicus gigas</i>)	negative	negative	negative	negative	negative	negative

* e.g. PCR, RFLP-PCR, Microarray, Sequencing Technologies

** Consensus values $\geq 75\%$ positive or negative results of PT-participants

Intended Use

- for laboratory use only, no food!
- validation of analytical methods
- control sample for quality control charts
- test material for inter-laboratory comparisons
- no medical use

Storage Instructions and Handling Information

The material should be stored as stated on page 1. Before use of the material should be warmed up to room temperature. The content should be mixed thoroughly prior to subsampling (see minimum sample size above). The material should be weighed immediately after opening of the foil poche/bottle and closed again afterwards in order to avoid uptake of moisture. Frequent freezing and thawing should be avoided as this can lead to changes in the properties of the material. The expiry date of this RM is based on the current knowledge and applies only for proper storage conditions in the originally closed foil poche/bottle.

Safety Precautions

The usual laboratory safety precautions should be applied when working with the RM considering the type of ingredients, parameters and its concentration.

Data Source

The material was analyzed by 10 laboratories within the related proficiency test (PT). Different analytical methods have been used.

Various

The user must determine the suitability of this RM for its particular purpose. DLA makes no warranty of any kind, expressed or implied, other than its products meet all quality control standards set by DLA. We do not guarantee this product can be used for a special application.

Datum / Date: 5 April 2025

Matthias Besler-Scharf, PhD (EP-Koordinator / PT-Coordinator)
- gezeichnet / signed M. Besler-Scharf

