



MarinTrust Standard V2

By-product Fishery Assessment

*DNK10 - European pilchard/sardine
(Sardina pilchardus)*

in FAO 27, ICES Divisions 8.c and 9.a

MarinTrust Programme

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Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	European pilchard/sardine (<i>Sardina pilchardus</i>)
	Geographical area:	FAO Area 27 - Northeast Atlantic
	Country of origin of the product:	Denmark Flag country: Spain, Portugal
	Stock:	European pilchard/sardine (<i>Sardina pilchardus</i>) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters)
Date	08 th March 2024	
Report Code	DNK10	
Assessor	Ana Elisa Almeida Ayres	
Country of origin of the product - PASS	Denmark Flag country: Spain, Portugal	
Country of origin of the product - FAIL	N/A	

Application details and summary of the assessment outcome			
Company Name(s): Thyborøn, FF Skagen A/S			
Country: Denmark		Flag country: Spain, Portugal	
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		Global Certification Trust/NSF	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/Re-approval
Ana Elisa Almeida Ayres	Matthew Jew	0.5	Reapproval
Assessment Period	March 2024 – March 2025		

Scope Details	
Main Species	European pilchard/sardine (<i>Sardina pilchardus</i>)
Stock	European pilchard/sardine (<i>Sardina pilchardus</i>) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters)
Fishery Location	FAO Area 27 - Northeast Atlantic
Management Authority (Country/ State)	European Union (Common Fisheries Policy-CFP), Danish Directorate of Fisheries (<i>Fiskeristyrelsen</i>)
Gear Type(s)	Purse seine (99%) and other gears
Outcome of Assessment	
Peer Review Evaluation	Agree with assessor's recommendation
Recommendation	APPROVED

Table 2. Assessment Determination

Assessment Determination
If any species is categorised as Endangered or Critically Endangered on Union for Conservation of Nature's Red List of Threatened Species - IUCN's Red List, or if it appears in the Convention on International Trade in Endangered Species of Wild Fauna and Flora - CITES appendices, it cannot be approved for use as MarinTrust raw material. European pilchard/sardine (<i>Sardina pilchardus</i>) is not categorised as Endangered or Critically Endangered on IUCN's Red List and does not appear in CITES appendices; therefore, European pilchard/sardine (<i>Sardina pilchardus</i>) is eligible for approval for use as MarinTrust by-product raw material. There is a species-specific management regime in place for this stock including a stock assessment with reference points defined and a TAC set and therefore, the stock was assessed under Category C. In the last stock assessment, removals are considered and the stock is above its limit reference point Blim and MSY Btrigger, therefore the stock PASSES clauses C1.1 and C1.2. Therefore, European pilchard/sardine (<i>Sardina pilchardus</i>) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters) is APPROVED for the production of fishmeal and fish oil under the current MarinTrust v2.3 by-products standard.
Fishery Assessment Peer Review Comments
The assessor correctly classified European pilchard/sardine (<i>Sardina pilchardus</i>) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters) as Category C, the stock is subject to a specific management regime and reference points are defined. Fishery removals are considered in the stock assessment process. The most recent stock assessment shows that the stock is above MSY Btrigger, Bpa, and Blim. Therefore, because the stock has biomass above the limit reference point, it passes Category C. European pilchard/sardine (<i>Sardina pilchardus</i>) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters) passes both clauses (C1.1 and 1.2) and therefore should be approved under the MarinTrust Standard v.2.3.
Notes for On-site Auditor
N/A

Species Categorisation

NB: If any species is categorised as Endangered or Critically Endangered on the IUCN Red List, or if it appears in CITES Appendix 1, it **cannot** be approved for use as an MarinTrust raw material.

IUCN Red list Category

By-product material from a species listed by IUCN (the International Union for Conservation of Nature) under the Red List for the following categories shall immediately fail the assessment;

- EXTINCT (E) AND EXTINCT IN THE WILD (EW)
- CRITICALLY ENDANGERED (CR) facing an extremely high risk of extinction in the wild.
- ENDANGERED (EN) facing a very high risk of extinction in the wild.

By-product material may be used from the following categories provided that all clauses in the MarinTrust standard are passed.

- VULNERABLE (VU) facing a high risk of extinction in the wild.
- NEAR THREATENED (NT) does not qualify for above now, but is close or is likely to qualify for, a threatened category in the near future.
- LEAST CONCERN (LC) Widespread and abundant.
- DATA DEFICIENT (DD) and NOT EVALUATED (NE)

Table 3 Species Categorisation Table

Common name	Latin name	Stock	Management	Category	IUCN Red List Category ¹	CITES Appendix 1 ²
European pilchard/sardine	<i>Sardina pilchardus</i>	Sardine in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters)	Yes	C	LC ³	No

¹ <https://www.iucnredlist.org/>

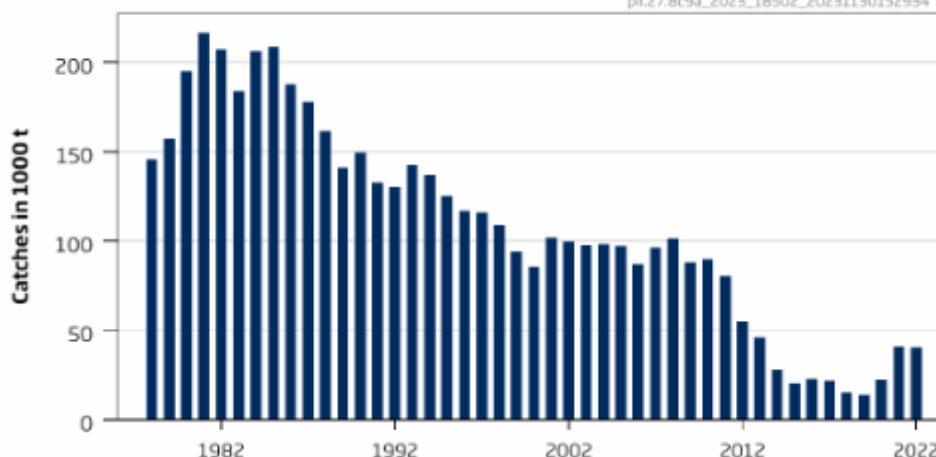
² <https://cites.org/eng/app/appendices.php>

³ <https://www.iucnredlist.org/species/198580/15542481>

CATEGORY C SPECIES

In a by-product assessment, Category C species are those which are subject to a species-specific management regime and are usually targeted species in fisheries for human consumption.

Clause C1 should be completed for each Category C species. If there are no Category C species in the fishery under assessment, this section can be deleted. Where a species fails this Clause, it should be assessed as a Category D species instead.

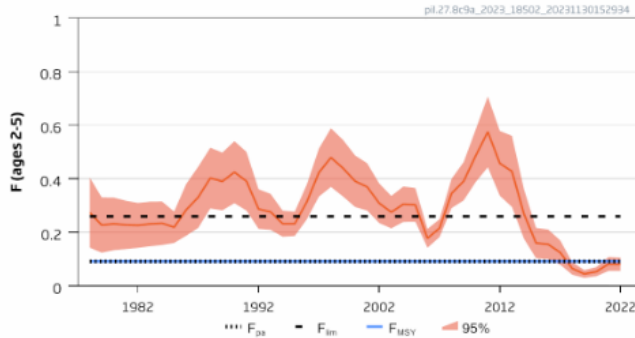
Species Name		European pilchard/sardine (<i>Sardina pilchardus</i>)	
C1	Category C Stock Status - Minimum Requirements		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	Pass
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.	Pass
Clause outcome:			Pass
C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.			
ICES advises that when the MSY approach is applied, catches in 2024 should be no more than 38,992 tonnes.			
The assessment type is an age-based analytical assessment (Stock Synthesis) that uses catches in the model and in the forecast. The input data includes commercial catches (international landings, ages from catch sampling); annual acoustic spring survey indices (ages from PELAGO [A6723] and PELACUS [A2111]; 1996–2023), juvenile index (age 0 abundance in 9aCN from autumn acoustic surveys SAR-PT-AUT [A7387], JUVESAR [A2281] and IBERAS [A4907]; 1997–2023), triennial spawning-stock biomass (SSB) indices from the Sardine Daily Egg Production Method survey (PT-DEPM [I7533] and SP-DEPM [I9787]); triennial stock weights and maturity data from DEPM (PT-DEPM [I7533] and SP-DEPM [I9787]; 1997–2023), interpolated for other years; natural mortalities based on the Gislason formula. Discarding is considered negligible and is not included in the assessment. Bycatch is negligible.			
Catches are presented in the figure below (Figure 1).			
Catches  Figure 1. Long term catches for European pilchard/sardine in divisions 8.c and 9.a from 1978 to 2022 (ICES, 2023).			
Fishery removals of the species in the fishery under assessment are included in the stock assessment process. C.1.1 is met.			

C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.

ICES defines the reference points in accordance with the MSY (target) and precautionary (target/limit) approaches. MSY $B_{trigger}$ and B_{pa} are set at 252,523 tonnes, B_{lim} is set at 196,334 tonnes, F_{MSY} and F_{pa} is 0.092, and F_{lim} is 0.26.

Fishing pressure on the stock is below F_{MSY} and stock size (ages 1+) is above $B_{trigger}$, B_{pa} and B_{lim} (Figure 2).

Fishing Mortality



Biomass 1+

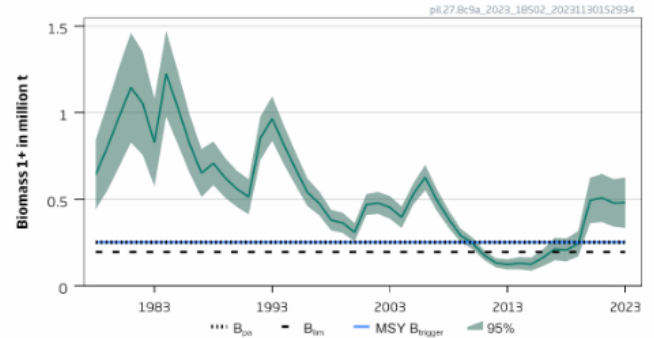


Figure 2. European pilchard/sardine in divisions 8.c and 9.a. Summary of the stock assessment (ICES, 2023).

The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy). C.1.2 is met.

References

ICES. 2023. Sardine (*Sardina pilchardus*) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters). In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, pil.27.8c9a. Published in December 2023. <https://doi.org/10.17895/ices.advice.21975209>

Links

MarinTrust Standard clause	1.3.2.2
FAO CCRF	7.5.3
GSSI	D.3.04, D5.01