



Agenda Item 4

CX/FFP 14/33/6

JOINT FAO/WHO FOOD STANDARDS PROGRAMME  
CODEX COMMITTEE ON FISH AND FISHERY PRODUCTS

Thirty-third Session

Bergen, Norway

17 – 21 February 2014

STANDARD FOR SMOKED FISH, SMOKE-FLAVOURED FISH AND SMOKE-DRIED FISH  
SECTION 4 FOOD ADDITIVES  
(At Step 6 of the Procedure)

Comments submitted by European Union, Norway and United States of America

**EUROPEAN UNION**

The EU would welcome a clarification on the technological need for using a blue colour - **brilliant blue FCF (INS 133)** in smoked fish. Without a proper technological justification the EU does not support the use of this colour in smoked/smoked-flavoured fish.

Regarding **INS 150a Caramel I** – plain caramel, the EU supposes that this food colour is intended to be used in spice seasoning for smoked fish. The EU fully concurs with the CCFPP's view that if additives were used in spices, there was no need to list them if they had no technological function in the end product (REP 13/FFP, para 35).

Regarding the use of **sodium nitrite**, the EU would like to reiterate the safety concerns. According to the JECFA's evaluation of nitrate and nitrite (44<sup>th</sup> report, WHO Technical Report Series, p. 30) *nitrosamines can be formed in food under suitable conditions as a consequence of chemical reactions between nitrosatable precursors in food (e.g. amines) and nitrosating agents (e.g. nitrite and nitrogen oxides)*. It is well recognised that fish may contain high levels of secondary amines and therefore there is a high potential of nitrosamine formation.

Moreover, according to JECFA (44<sup>th</sup> report, WHO Technical Report Series, p. 30) *several studies showed that food preparation techniques such as malting, **smoking**, drying and broiling of meat and **fish products**, can, under certain conditions, promote the formation of nitrosamines*.

Since the prevention of *Clostridium botulinum* toxin formation in smoked fish is sufficiently guaranteed by a variety of measures provided for in part 6.5 and annex 2 of the draft standard, the EU cannot see any benefit of using sodium nitrite in smoked/smoked-flavoured fish and therefore, taking into account the safety aspects, does not support this use.

**NORWAY**

Colour: Brilliant Blue FCF (133), Maximum Level 100 mg/kg

Comment: We do not support the use of Brilliant Blue FCF (133) in Smoked Fish and Smoke Flavoured Fish.

Reason: Brilliant Blue FCF (133) is not authorized in these products in Norwegian legislation. From a technological point of view we cannot see any need for the blue colour in smoked & smoke-flavored fish.

Colour: Caramel 1 – plain caramel (150a), Level GMP

*Comment:* We do not support the use of Caramel 1 – plain caramel (150a) in Smoked Fish and Smoke – Flavoured Fish.

*Reason:* Caramel 1 – plain caramel (150a) is not authorized in these products in Norwegian legislation. From a technological point of view we cannot see any need for Caramel 1 – plain caramel in smoked & smoked flavoured fish. In cases where the colour is used in spice seasoning for smoked fish, there is no need to list the provision is the standard.

Preservative (for reduced oxygen packaged products only): Sodium nitrite (250), Maximum Level 200 mg/kg

*Comment:* We do not support the use of Sodium nitrite (250) in Smoked Fish and Smoke – Flavoured Fish.

*Reason:* Sodium nitrite (250) is not authorized in these products in Norwegian legislation. Norway would like to express its safety concerns on the use of Sodium nitrite (250) in Smoked Fish and Smoke – Flavoured Fish.

***Comments on the recommendations from CCFA on several food additive provisions in the Standard for Smoked Fish, Smoke-Flavoured Fish and Smoke-Dried Fish*****4.1 Smoked Fish, 4.2 Smoke-Flavoured Fish**Tartaric acid L+ (334), Maximum level 200mg/kg

*CCFA endorsed, however gave a recommendation to CCFFP: All tartrates as listed in the GSFA “tartrates” (INS 334, 335(i)(ii), 336(i)(ii), 337) be permitted.*

*Comment:* The provisions for tartrates are defined at the additive group level, and thus apply to the *total* content of the additives participating in this group. Additives that make up this group are provided for reference only. Therefore we can support the recommendation from CCFA.

Sodium erythroate (316), maximum level GMP

*CCFA endorsed, however gave a recommendation to CCFFP: This food additive (INS 316) is also known by the name sodium isoascorbate in CAC/GL 36-1989 – Class Names and International Numbering System for food additives.*

*Comment:* We support the recommendation from CCFA to use the name *sodium isoascorbate*. We therefore recommend the CCFFP to amend the additive name of INS 316.

*Reason:* This will be in consistency with CAC/GL 36-1989.

**4.2 Smoke-Flavoured Fish**Dextrins, roasted starch (1400), Maximum level GMP

*Not endorsed by the CCFA, the following comments and recommendation were given to CCFFP: Dextrin is used as a carrier for flavourings. Flavourings may contain additives that do not have a technological function in the final food – that is they exist as carryover. Therefore, there is no need for permission for dextrins, roasted starch in this standard. Recommendation: Consider whether this provision could be replaced by a reference to the Guidelines for the Use of Flavourings (CAC/GL 66- 2008), as this additive is used in flavourings and had no technological function in the final product.*

*Comment:* We support the comments from CCFA that there is no need for permission for dextrins, roasted starch in this standard. We recommend the CCFFP to replace this provision by the following wording for the reference to CAC/GL 66- 2008: **Smoked flavourings used in smoked flavored fish covered by this standard should comply with the guidelines of the use of flavorings CAC/GL 66-2008.**

Polyoxyethylene (20) sorbitan monooleate (433), maximum level 1000 mg/kg<sup>3</sup>

*Not endorsed by the CCFA, the following comments and recommendation were given to CCFFP: Polyoxyethylene (20) sorbitan monooleate is used in flavourings and does not need to be listed as an additive with a technological function in the final food. Recommendation: Consider whether this provision could be replaced by a reference to the Guidelines for the Use of Flavourings (CAC/GL 66- 2008), as this additive is used in flavourings and had no technological function in the final product.*

*Comment:* We support the comments from CCFA that there is no need for permission for dextrins, roasted starch in this standard. We recommend the CCFFP to replace this provision by the following wording for the reference to CAC/GL 66- 2008: **Smoked flavorings used in smoked flavored fish covered by this standard should comply with the guidelines of the use of flavorings CAC/GL 66-2008.**

## **UNITED STATES OF AMERICA**

**Brilliant Blue FCF:** We support inclusion.

Reason: Brilliant blue FCF is used to adjust the color in cold smoked fish.

**Caramel 1:** We support inclusion.

Reason: Caramel 1 is used in smoked fish spice seasoning mix in order to impart color to the final smoked fish product. Caramel 1 is listed in the GSFA Table 3 for general use under the GMPs outlined in the preamble of the GSFA.

**Sodium nitrite:** We support inclusion.

Reason: Sodium nitrite is widely used in vacuum packaged hot and cold smoked fish products to help retard *Clostridium botulinum* growth and toxin formation. *C. botulinum* in refrigerated vacuum packaged product can be controlled with a combination of 100 mg/kg nitrite and 3.0% salt. Without nitrite, 3.5% salt is required to control *C. botulinum*.

Reference: Pelroy, G. A, M. W. Eklund, R. N. Paranjpye, E. M. Suzuki, and M. E. Peterson. 1982. Inhibition of *Clostridium botulinum* types A and E toxin formation by sodium nitrite and sodium chloride in hot process (smoked) salmon. *J. Food Prot.* 45:833-841.

The limitation for “**reduced oxygen packaged products only**” should apply because sodium nitrite is used to control *Clostridium botulinum* in these packages.

### **4.2 Smoke-Flavoured Fish**

We support the use of the additives listed above in smoke-flavored fish as well, for the same reasons listed above.