

## MOH

### Matrix interferences and contamination in spices

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## European Spice Association

- The European Spice Association (ESA) is the umbrella organisation of the European spice industry. ESA brings together the expertise of this wide group of people to promote the use of pure, safe and wholesome herbs and spices that are true to name and provide the quality and safety that is expected by the consumer.
- The European Spice Association represents (directly and through its national associations) more than 350 European companies in the dried culinary herbs and spices industry across the EU.
- Herbs and spices are the ingredients used to give food and beverage products aroma, flavour, preservation, and colour. These products are derived from various plant parts, including flowers, barks, fruits, buds, seeds, leaves, roots, and plant tops.
- While Asia is the leading importer of spices with 47% of the market share, Europe is the second largest world's importing region for spices as it accounts for about one quarter of the world's total imports of spices. In 2019 Europe imported around 25% (around 370.000 tons) of the global production, followed by North America (18%), Africa (5%), Latin America, the Caribbean (3%) and Oceania (2%).

## Background

- **Food safety comes first!** This is an overarching principle for the EU spice sector.
- Despite the presence of mineral oil hydrocarbons (MOH) in herbs & spices is a huge challenge for our sector, the herbs and spice companies in Europe are monitoring MOH for many years and **took measures to reduce mineral oil hydrocarbons in herbs and spices with great success.**
- Herbs and spices are used in many sectors in food industry, but **consumed much lower** than main foodstuffs.
- Herbs and spice companies are confronted with huge difficulties due to 1) Analytical methods and 2) complex supply chain relying mainly on Third Countries.

## Herbs and Spices: very low intake

- Herbs & Spices are consumed in the range of appr. 3,2 g per day per person\*.
- This value is compatible with the WHO GEMS/Food Cluster Diets 2013\*\*, where the consumption of the whole category of “*herbs (seasoning and herbal tea), spices, condiments and sauces*” is in the range 2,74 g – 10,28 g per day per person, depending on the geographical cluster (higher consumption cluster in Europe: G11 Belgium, the Netherlands). In Germany (G08 cluster) the whole category consumption is 4,79 g per day per person.
- MLs included in the proposal, as applied to herbs & spices, would have a **very limited effect to the exposure** of consumers due to the negligible intake of herbs and spices.
- Our sector supports tools to reduce the exposure to mineral oil hydrocarbons (MOH), but any measure should be driven by a **comprehensive risk assessment** and **should be proportionate**.

\* Source: Official German Trade Statistic 2022, published by Fachverband der Gewürzindustrie e.V., interpreted by ESA as worst case approach

\*\* Source: WHO GEMS/Food cluster diets (<https://www.who.int/data/gho/samples/food-cluster-diets>)

## Highest reported LOQ’s applied to selected herbs & spices

- A considerable percentage of Herbs & Spices according to the data collected, are lower than the highest reported LOQ!
- The highest reported LOQ’s are several times higher than the proposed ML’s by the EC.

Name of herb or spice	LOQ [mg/kg] MOAH - LAB 1	LOQ [mg/kg] MOAH - LAB 2	LOQ [mg/kg] MOAH – LAB 3	LOQ [mg/kg] MOAH - LAB 4	MOAH 90. Percentile [mg/kg]
Paprika, Chili (no. of samples: 550)	No analyses done	0,5 – 10	0,5 - 10	1 (2 samples)	6,33
cloves, nutmeg (no. of samples: 346)	2 - 6	1 - 2	0,5 - 5	No analyses done	4,2
Thyme, laurel leaves, majoram, oregano (no. of samples: 471)	0,2 - 5	1 - 4	0,5 - 10	1 - 3	5,5
Cumin (no. of samples: 521)	2 – 4 (4 samples)	1 - 2	0,5 - 5	No analyses done	4,05
cinnamon, Cassia (no. of samples: 388)	2 - 4	1 - 2	0,4 - 2	1 (9 samples)	1,37

- Main reasons for the high analytical variance are **natural sources** as mentioned in FDE-presentation.
- Analytical methods **shall be of good quality and deliver robust results** – by the way the same for MOSH.

Source: data provided by 4 leading German laboratories to Fachverband der Gewürzindustrie, analysed 2020 - 2023

## Efforts, but challenges

- European processors have identified root causes of process contaminants, and eliminated own impacts which overall are little.
- Despite already huge efforts and extensive investigations, both countries of origin and European processors have not yet identified in full the root cause of MOH contamination on farming level and supply chain due to the **diverse agricultural context** in the origins.
- European spice industry highly supports sustainability which needs a **long time strategy** to
  - **secure future sourcing and stimulate economic growth in producing countries,**
  - **improve education and social fairness,**
  - **reduce waste and environmental pollution,**
  - **improve technical resources.**
- Hard legal restriction in the EU without respecting risk assessment bring farmers to **divert production to non-EU countries.**



## The draft proposal: our concerns

- Proposed ML's based on current LOQ's are not sustainable for the Herbs & Spices processors nor for the farmer communities.
- Third countries are already reluctant to sell to the EU. Strict limits on MOH would worsen this trend.
- The impact of a shortage of Herbs & Spices in the market will be not proportional to the negligible intake of MOH channeled by Herbs and Spices.
- But the impact to Europe's food production would be huge, as Herbs & Spices are fundamental for many food sectors, despite use is in low amounts.

## Our views

- Additional reflection on ML's for the herbs and spice sector is needed, including further scientific analytical work.
- **A collapse of the EU herbs & spices sector and its impact to Europe's food industry must be avoided.**
- The herbs and spice sector is ready to cooperate on further discussions and engage on reducing the exposure with MOH.
- A balanced position for our sector based on risk assessment is needed.
- Precautionary principle is in any case disproportionate in this case. A very low intake of herbs and spices is a very small exposure of MOH

→ **Herbs and Spice Industry asks for exemption of ML's**

**Thank you for your attention!**