

Summary of UFAS Compound Feed Dioxin Data 2018- 2024

Background

Following the identification of illegal activity in the fats and oils supply chain that resulted in the production of contaminated feed in Germany AIC commenced their dioxin feed testing programme in 2018.

The two primary aims of the AIC dioxin testing programme are:

- To provide verification that dioxin controls in the feed supply chain are effective
- To allow investigations into specific ingredients should evidence of contamination be found

Dioxin Analysis

The data from the 2024 sampling session includes results from samples submitted by UFAS Participants under the Compound Category. The feed businesses were located the United Kingdom and the Republic of Ireland. This combined dataset provides a broad overview of dioxin levels in animal feed across the British Isles.

Results for the following parameters are reported.

- Non-dioxin-like PCBs
- Dioxins & furans
- Dioxin-like PCBs

In total 86 samples were tested in the 2024 sampling session (1 March 2024 to 28 February 2025). Complete feeds, complementary feeds as well as premixtures were tested. Due to Covid, only 2 samples were tested in 2020. Results from fish food, pet food or fur bearing animal feed are not included in this testing programme summary.

Results

Dioxins and Furans

The legal limit for dioxins and furans in compound feed is 0.75 ng/kg. Review of the results showed all samples were below the legal maximum. An action limit is however set at 0.5 ng/kg. One sample of a ruminant blend was found to contain levels just below this action limit at 0.43 ng/kg. Results are expressed as “upper bound” figures, which means it is essentially the sum of the limits of detection for each “congener” tested for, plus any contamination found. The 2018 to 2024 results are presented in figure 1.

Dioxin-like PCBs

There is no legal limit for dioxin like PCB's. An action limit of 0.35 ng/kg is however in place. No samples in any of the years exceeded this limit. The trend showed an overall increase in 2023 and 2024 compared with previous testing years. The results are presented in figure 2.

Non-Dioxin Like PCBs

The legal limit in feeds of non-dioxin like PCBs is 10 ug/kg. All samples were very low and below this limit. The results are presented in figure 3.

Sum of Dioxins/Furans & Dioxin like PCBs

The legal limit for dioxins/furans and dioxin like PCBs is 1.5 ng/kg, “upper bound”. All samples were below the legal limit. The results are presented in figure 4.

Conclusion

There is no evidence of dioxin contamination being an issue within the UK and Republic of Ireland compound feed industry. This brings assurance to those in the animal feed, animal production and food industries that current control measures on feed ingredients at risk of contamination appear to be working, which principally include fats & oils, minerals and products which have been direct dried. The 2023 and 2024 data indicted an overall increase of some dioxin components compared with previous years, however due to the lack of samples in 2020, 2021 and 2022 it is difficult to determine if the increase detected is representative and a true trend exists. The continued collaborative monitoring of dioxin levels in compound feeds by the UK

and Irish feed industry will permit trends to be monitored, thereby allowing evaluation of any meaningful changes in feed dioxin content.

Figure 1: Dioxin and Furan 2018 -2024 Summary

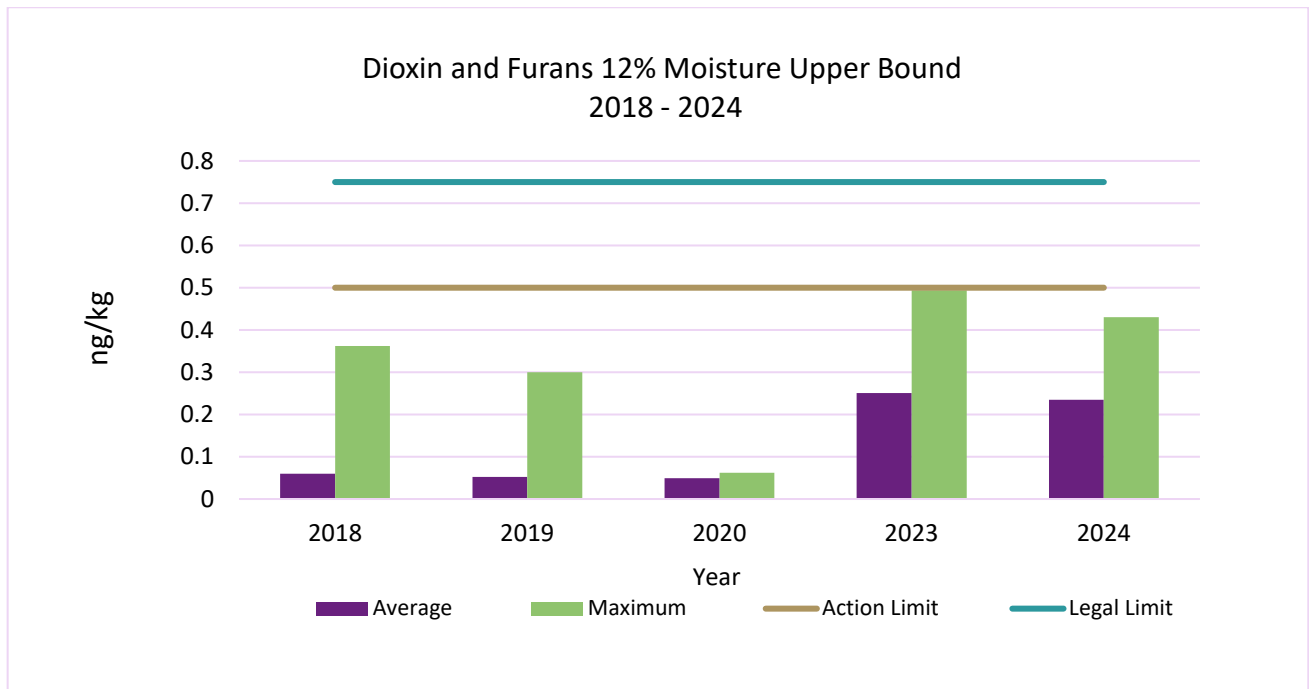


Figure 2: Dioxin Like PCB's 2018 – 2024 Summary

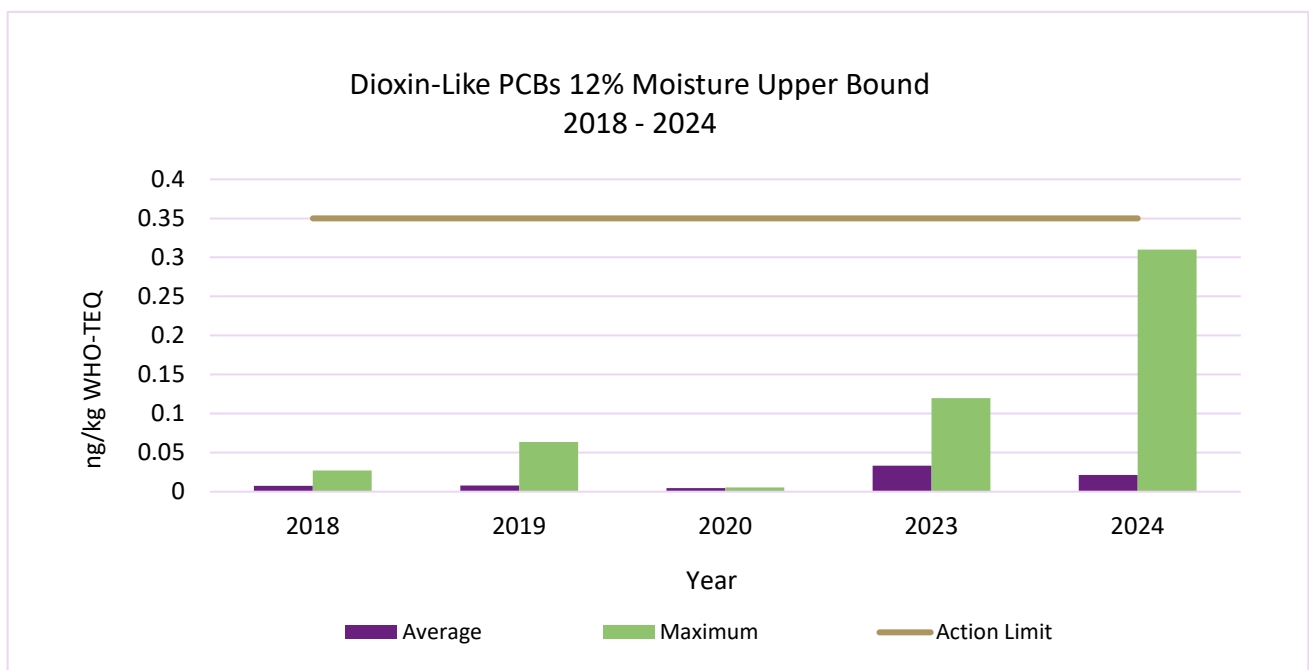


Figure 3: Non-Dioxin Like PCBs 2018 – 2024 Summary

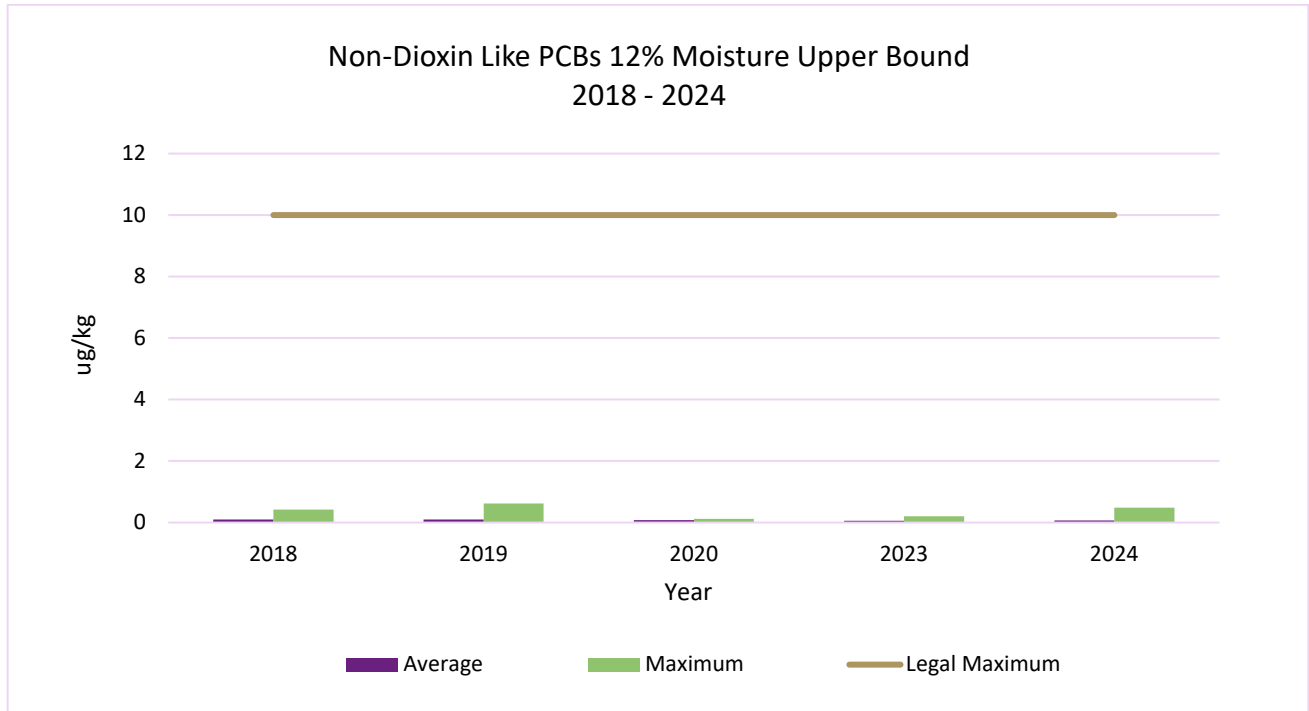
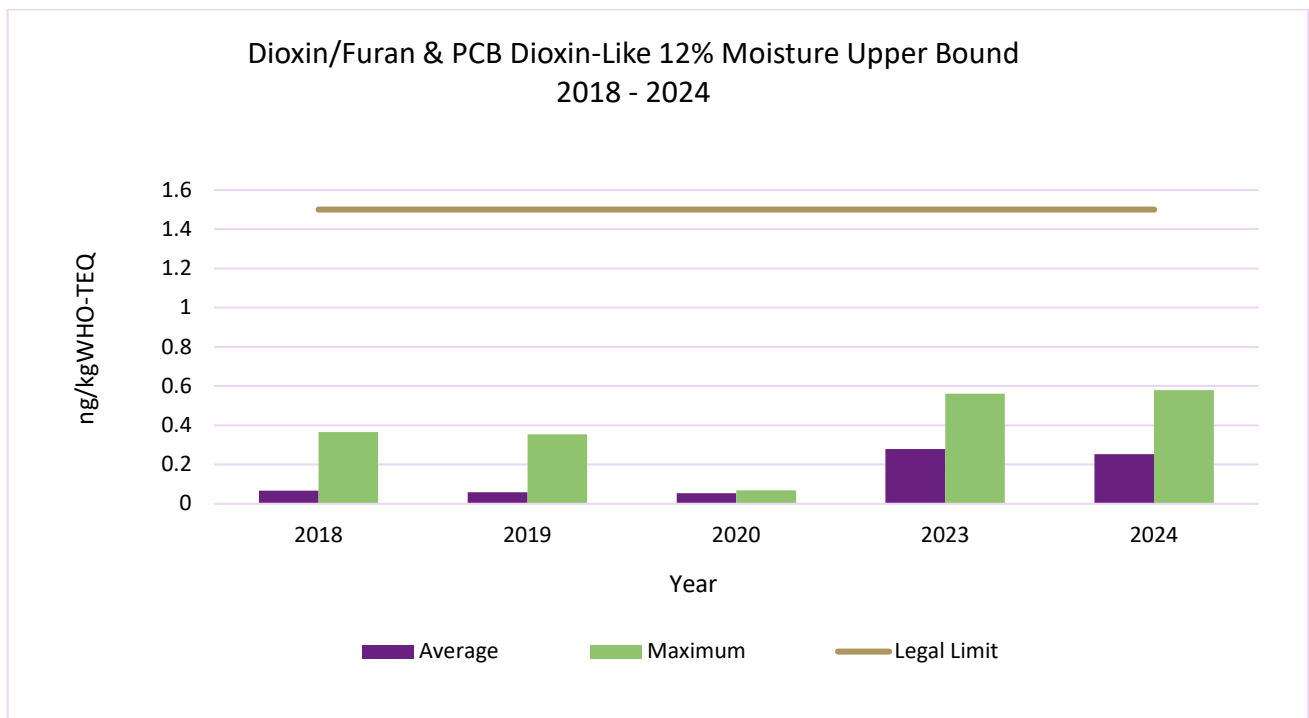


Figure 4: Sum of Dioxin, furans and dioxin like PCBs Summary





For more information, please contact

Sarah-Jane Godfrey

Technical Manager

sarah-jane.godfrey@agindustries.org.uk

01733 385230