Technical Bulletin N° 335

B-TRAXIM® 2C Zn MORE STABLE THAN COMPETITORS IN ACIDIC LIQUID FEEDS

KEY FINDINGS

B-TRAXIM® 2C Zn is more stable than 2 well-known competitors. This confirms the higher strength of the specific and patented metal-glycine bond of B-TRAXIM® 2C in acidic media.

INTRODUCTION AND OBJECTIVE

Market constantly requires data on the stability of B-TRAXIM® 2C. Pancosma was asked to study the stability of different organic trace elements in some liquid feeds of acidic pH.

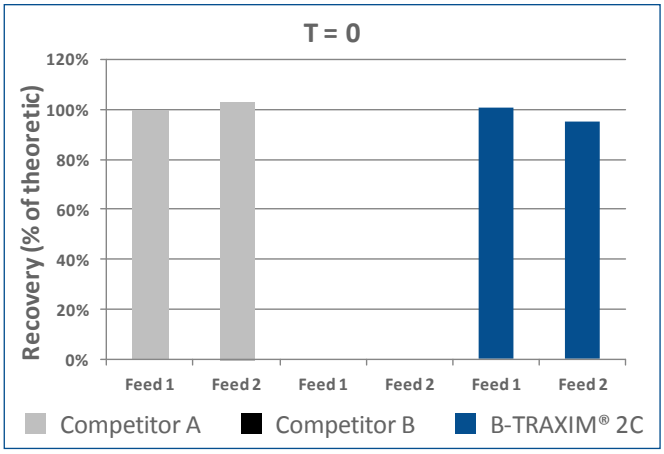
MATERIAL AND METHODS

Three organic zinc sources: B-TRAXIM® 2C, amino acid complex (Competitor A) and methionine hydroxy analogue chelate (Competitor B) were included in the 2 liquid feeds (Feed 1 and Feed 2) at customers suggested inclusion levels. The Electrothermal vaporization coupled to inductively coupled plasma atomic emission spectrometry (ETV-ICP-AES) analytical method was used and allowed characteristic chemical form quantification. Analyses were performed by UT2A laboratory (Pau, France) at t= 0 and after 10 days and permitted to study organic form stabilities. Recoveries were calculated based on analytical results and inclusion levels.

RESULTS

Competitor B was not stable under its original chemical form at T=0 as it presented several peaks in both feeds. This did not allow its quantification.

B-TRAXIM® 2C Zn and Competitor A were very similar in terms of recovery at T = 0 in both feeds with recovery levels ranging between 105% and 95% difference which can be considered as analytical variation.



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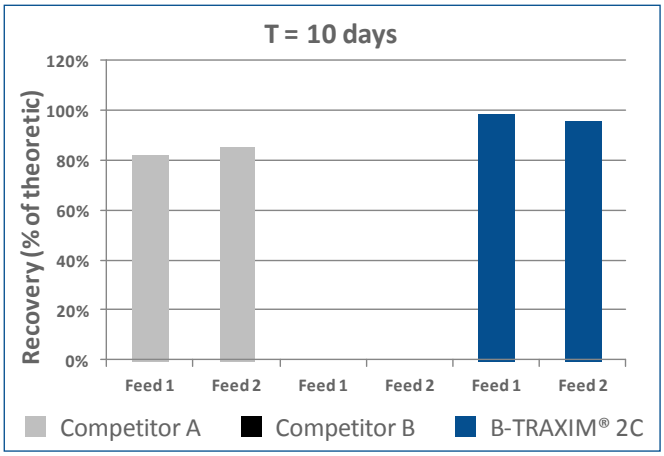
After 10 days, the higher stability of B-TRAXIM® 2C Zn was confirmed.

Competitor B analytical results presented the same pattern than at T = 0. Quantification could not be done and highlight the very poor stability of the product.

Competitor A lost almost 20% of its characteristic chemical form when B-TRAXIM® 2C Zn recovery was similar to the one observed at T =0 and very close to 100%.



CONCLUSION

- **At T = 0, B-TRAXIM® 2C Zn and Competitor A were stable.**
- **At T = 10, only B-TRAXIM® 2C Zn was stable.**

Only B-TRAXIM® 2C shows constant stability, in specific feeds, including acidic media. Other chelates (Competitor A or B) do not present the same stability.

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