

21COFA-PP02 February 25th 2021

POSITION FROM COFALEC TECHNICAL COMMITTEE

Question:

Is it correct to call an active Baker's yeast strain (Saccharomyces cerevisiae) which has the increased ability by using its own *native metabolic enzymes* to generate a certain functionality as an enzyme product and not a yeast product?

The yeast strain was evolved to naturally produce elevated levels of certain enzymes, *naturally* found in S. cerevisiae and its activity is intrinsically linked to the metabolism of the live cell. The activity cannot be separated from the yeast cell and therefore should not be considered as an enzyme product but a yeast product. This active yeast product can function similarly to other active dry yeast products like consuming sugar, producing carbon dioxide and ethanol.

Answer and arguments:

The opinion from the Technical Committee is that it should be considered as a yeast product, it is not correct to call it an enzyme product, because:

A) It is a living yeast cell which generates certain enzymes as well as other functionalities. As the enzymatic activity is linked to the living cell organism it should be rated as yeast product and not reduced to a certain functionality (whether it being alcohol generation, flavour generation, certain enzymatic activities).

B) It is a different situation if an isolated enzyme is the final product which is not linked to its living cell anymore. The difference of a single functionality would be if those enzymes or materials would be extracted and refined and handled as a single enzyme— then in those cases it is correct to rate those products according to their functionality as an enzyme product.