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CHARACTERISATION OF OXYGEN CONSUMPTION IN A FLOCCULATING YEAST STRAIN

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Summary

Flocculation bioreactors are-one of the most attractive cell retention systems. However, diffusional limitations for mass transfer in flocs are a significative drawback. One way to circumvent these limitations is the utilisation of charged polymers that control floc porosity.Mass transfer limitations may also induce metabolic alterations in the cells inside the flocs.In yeast fermentation it is the conjugated action of glucose and oxygen, that controls the dominating metabolic pathway.The characterisation of the effect of an anionic polymer - Magna Floc LT 25 - in oxygen transfer, oxygen consumption and metabolic activity - in a flocculating strain of Saccharomyces cerevisiae is presented.