





"Nanostructured systems as thermal protection of functional ingredients in food and dietary supplements"

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Technology description

The present technology relates to nanostructured systems which can be used as thermal protectors of functional ingredients. Nanostructured systems are composed of nanoparticle systems, either nanocapsules or nanospheres. The size of nanoparticles is not bigger than 350nm in average. A nanoparticle is constituted by a polymer as a protective membrane; functional or active ingredients that are included in the core of the nanocapsule for its protection; stabilizing agents; and supporting solutions based upon food grade polymers.

Applications, usage and benefits of the technology

These nanostructured systems are useful in the production, processing, preparation, storage and packaging of food for human consumption, particularly to protectors of functional ingredients in food systems and food supplements.





Technology readiness Level

Experimental.

Market information



It is estimated that the market value of the nano-coatings will be 8 billion usd in 2024. One of the factors driving market growth is the increasing number of applications of coatings.