

# Stability of Spray-Dried Encapsulated Carotenoid Pigments from Rosa Mosqueta (*Rosa rubiginosa*) Oleoresin

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Oleoresin of rosa mosqueta (*Rosa rubiginosa*) was encapsulated with starch or gelatin by spray-drying. Stability of the powders was studied at 25, 40, and 55°C in the dark. Degradation of trans-rubixanthin, trans-lycopene, and trans-?-carotene followed a pseudo-first-order kinetic model for both encapsulating agents. The gelatin matrix provided a greater protective effect over the main carotenoid pigments, as shown by the lower degradation rate constants and the longer half-life values at 21 °C. In contrast, the carotenoid pigments showed the same degradation rate in starch, but trans-?-carotene was more stable in gelatin. The kinetic compensation effect obtained according to the calculated thermodynamic parameters suggests that the carotenoids are degraded by the same mechanism.