

Natural and Stable Pigments from Flower Petals

Anthocyanins and lutein

FeyeCon has recovered valuable natural pigments from flower petals that were considered a waste product. FeyeCon used a new selective extraction process based on supercritical CO₂. The extracts have been further stabilized using our unique sc-CO₂ encapsulation process. The colorants recovered from the flowers are suitable to be used in food, cosmetics and pharmaceutical products.



Product prototypes for Microencapsulated Anthocyanin & Lutein

Extracted *Anthocyanins* and *Lutein* can be used as bioactive colorants in many different cosmetics formulations. FeyeCon has created several formulations which were tested for their ability to absorb UV light, free radical scavenging, and color stability within the product mixture. The results show that our extracted and encapsulated *Anthocyanins* and *Lutein* can be used as biological active ingredients such as antioxidants, UV-protection, and anti-aging compounds. The colorants are suitable to in the food and cosmetics industry. Some are even applied as active pharmaceutical ingredient.

CO₂ extracted pigments:

- 100% pure extracts
- No chemical solvents
- No residual solvents
- CO₂ is an inert fluid – Increasing extract stability and purity
- Mild process
- Low temperatures and inert atmosphere
- Colorants are stable in emulsions and suspensions

Mild encapsulated pigments:

- Mild process – ensuring maximum preservation of active ingredients
- Extracts are encapsulated with tailored and natural coatings matching required applications
- Maximized color intensity at limited pigment concentration
- Increased stability with high functionality
- Oil and water resistant
- Encapsulates are stable from UV and Temperatures

Applications

Lutein:

Food and Cosmetic Colorants
Antioxidant
UV-protection
Nutraceutical

Anthocyanins:

Food and Cosmetic Colorants
Antioxidant
Anti-inflammatory
Anti-microbial

