

**BioActives** LLC.

**MicroActive® Lutein Esters  
Technical Product Specifications**

Source: Marigold oleoresin

Appearance: Reddish waxy powder

Concentration: Not less than 15% lutein esters

Solubility: Insoluble in water, slightly soluble in ethanol, soluble in hexane, ethyl acetate and other hydrocarbon solvents

Quantitative Analysis: Spectrophotometry

$\lambda$  Maximum (nm): 445nm in hexane

Assay: Not less than 75 % lutein esters and related carotenoids

Heavy Metals:<10ppm

Pesticide Residues (organochlorine, organophosphorus):None detected

Salmonella sps, E.Coli, S. aureus, P. aeruginosa: Not detected

Total Plate Count:Min <10cfu/g Max 100cfu/g

Yeast and Mold:Min <10cfu/g Max 10cfu/g

Storage: Store in original packaging between 10-25oC and protect from light, heat and moisture.

Shelf-life:Shelf-life is over 12months when stored unopened as specified.

Use: Suitable dispersion in oil