

# ENCAP-ES

## MODIFIED FOOD STARCH



### ABOUT ENCAP-ES

ENCAP-ES is a creamy chemically modified food starch powder. It has low viscosity, fully soluble clear solution, excellent stability, film-forming and good emulsifying properties. These properties makes this product as a key ingredient for the development of encapsulated spray dried Flavours, Vitamins and spices. It is used in Nutraceuticals, Herbal and Functional food formulations as a replacement for expensive gums and proteins.

**Certified by “ KOSHER, HALAL, FSSAI, GMP & ISO “**

### Functional Benefits

- Used in the encapsulation / emulsification of oil soluble ingredients like carotenoid based natural colours, flavours, vitamins, nutrients, essential oils where it is converted into free flowing powders to protect them from oxidation and flavour loss.
- Minimum 99% cold water soluble.
- High oil absorption capacity.
- Improves product performance.
- Improves product stability.
- Enhances organoleptic properties.
- It forms very stable oil- in water Emulsions.
- Its excellent film forming ability helps to reduce the loss of volatile actives during spray drying.
- Low viscosity of ENCAP-ES allows preparing emulsion solutions with high solid content, which results faster spray drying with less conversion cost.

Particulars	Specifications
Product Name	ENCAP-ES
Color & Appearance	White (or) Creamish White & free flowing powder
Odour	No Odour
Loss on drying	Not more than 6.00 % w/w
Sulphur dioxide	Not more than 10 ppm
Solubility	Minimum 99 % cold water soluble
pH (5% solution)	Between 3.0 to 5.0
Particle size	Minimum 99 % passes through 100# ASTM sieve Minimum 85 % passes through 200 # ASTM sieve
<b>Heavy Metals:</b>	
Lead	Not more than 2.0 ppm
Arsenic	Not more than 1.0 ppm
Mercury	Not more than 0.1 ppm
Cadmium	Not more than 1.0 ppm
<b>Microbial load:</b>	
Total aerobic microbial count	Not more than 1000 cfu/g
Total yeast and mould count	Not more than 100 cfu/g
Escherichia coli	Should be absent/10g
Salmonella	Should be absent/10g
Pseudomonas aeruginosa	Should be absent/g
Staphylococcus aureus	Should be absent/g



### Applications

- Encapsulating agent.
- Food additive in water soluble formulations.
- Stabilizer
- Emulsifier

### Packaging & Storage

- Packed in a paper bag with additional inner LDPE liner.
- Net weight: 25 kg/bag.
- Stored in a cool and dry place, protected from sunlight and moisture.
- Two years shelf life under proposed packing & storage condition.