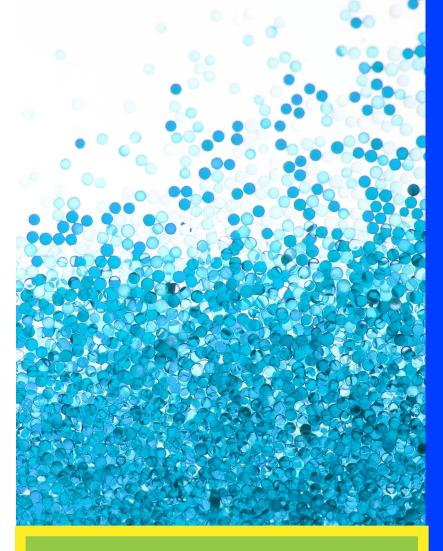


SPECIALISTS IN PARTICLE TECHNOLOGY
TOLL MANUFACTURING



## **HIGHLIGHTS**

- SPRAY DRYING
- PRILLING
- DRY WATER
- ALGINATE ENCAPSULATION
- IN-SITU POLYMERIZATION

## ENCAPSULATION TECHNOLOGIES

AVEKA has microencapsulation techniques that are applied to a wide range of materials serving a variety of industries such as food, personal care, and agriculture. Our broad scientific and engineering expertise gives us the ability to investigate and tailor the microencapsulation approaches to best meet your needs.

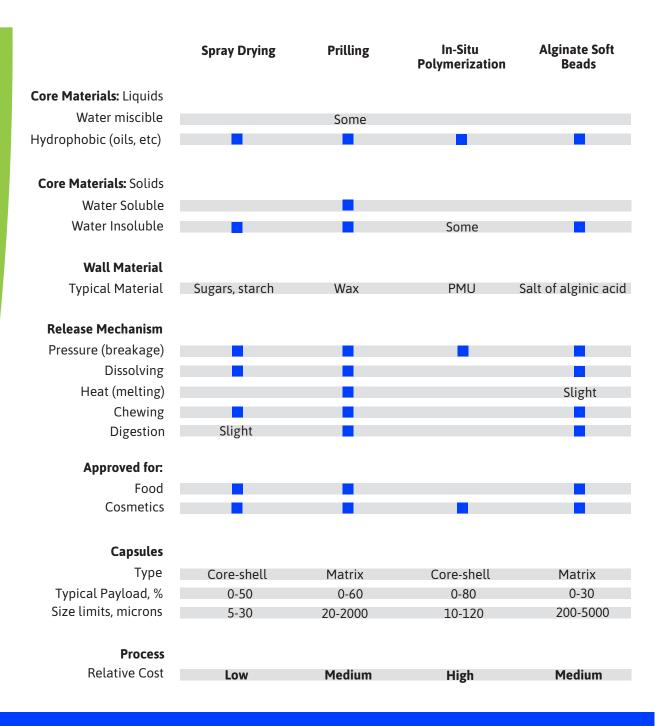
Our encapsulation technologies include processes such as spray drying, prilling, in situ-polymerization, and alginate encapsulation. We offer a number of bead formation techniques that provide innovative delivery systems and visual appeal. Each technique offers unique and specific advantages dependant on factors such as:

- BEAD SIZE
- RELEASE MECHANISM
- ACTIVE INGREDIENT
- ENCAPSULATION MATERIAL

AVEKA brings years of microencapsulation experience, with proven technology and an extensive intellectual property position to assist in developing and producing your unique engineered particle.

AVEKA is your microencapsulation solution provider from R&D to production.

## MICROENCAPSULATION



ADVANTAGES	Low cost, able to make water soluble walls	Can set release temperature by matrix material selection	Tough, imperme- able shell holds fragrances well	Approved for foods, beverages, wet or dry delivery
DISADVANTAGES	Limited to water soluble wall materials	Matrix-type capsule presents less resistance to fill release	Aggregation; cost	Capsules somewhat fragile. Some fills may leak slowly
IDEAL SYSTEM	Vitamin E oil in a water soluble shell	Flavor, color and nutraceuticals, solids	Fragrance oils in cosmetics	Emollients and fragrances for personal care products. Flavors, color in food