encapsulation technology

captivates™ encapsulates

captivates™ a

Captivates™ A encapsulates are core/shell microcapsules specifically designed for the encapsulation and delivery of fragrances into home care applications. Captivates™ A are made using a novel fragrance encapsulation process that utilizes acrylate chemistry. Where alternative fragrance encapsulation processes use formaldehyde or isocyanates to cross-link the polymer shells, neither are utilized in the process of making Captivates™ A.

Produced to a typical average particle size of 15–30 microns, Captivates™ A show outstanding performance in terms of fragrance capture and long term release. They are available with a range of portfolio fragrances, but can also be customized in terms of fragrance type, shell strength and release profile.

captivates™ gl

Captivates™ GL are encapsulates containing a matrix structure, produced using JetCutter™ Technology — rotating cutting wires that create hydrogel beads from a continuous jet of viscous fluid. The resulting droplets are transformed into solidified beads through various gelation techniques including thermal gelation and ion exchange — producing a uniform bead matrix that can contain high levels of encapsulated material.

Naturally derived materials such as agar, gellan gum, alginate and carrageenan are used as the matrix material.

Captivates™ GL are produced in sizes ranging from 250 µm to 3000 µm in diameter and can be used to encapsulate a wide range of materials including oils, pigments, abrasives and harmless bacteria. Delivery triggers include dilution, pressure and pH.

captivates™ hc

Captivates™ HC are core/shell microcapsules produced via complex coacervation using naturally derived gelatin and acacia (Gum Arabic) as the principal wall materials; they range from 15 µm to 2000 µm in diameter. Captivates™ HC with a minimum diameter above 250 µm can be used in otherwise clear or homogeneously opaque carriers to provide a striking visual impact while delivering actives or other ingredients with beneficial properties.

Smaller microcapsules in the 15 µm to 50 µm range and can be used to deliver fragrances or other lipophilic active ingredients onto substrates such as fabrics or hard surfaces. The optimization of size, core content and wall structure allows the properties of the microcapsules to be controlled and used in a wide range of formulations.

trade name	chemical description	features and benefits	applications
captivates™ a	captivates™ A are core/shell microcapsules produced to typical average particle size of 15–30 microns	encapsulation of fragrances excellent long term stability and performance high temperature stability customized properties non-formaldehyde process	dishwashing fabric care household cleaning
captivates™ gl	captivates™ GL are custom-manufactured spherical particles produced in sizes ranging from 250 µm to 3000 µm	creative sensory experience naturally derived formulation creativity high payloads of lipophilic and insoluble actives protection and delivery of sensitive ingredients targeted delivery and deposition ph, dilution and shear triggering visual differentiation	
captivates™ hc	captivates™ HC are custom-manufactured microcapsules produced in sizes ranging from 5 µm to 2000 µm		

committed to your formulation

At Ashland, our commitment to the household consumer product formulator goes beyond our commercial and custom technology portfolio. It includes an active R&D program on four continents to better support regional formulation objectives. Ask us how we better serve manufacturers with a technical team that serves all phases of your product development cycle. Ashland is ready to help you succeed in any market around the world.