

## PRODUCT TECHNICAL DATA SHEET

### Petals

**INCI Name Elements:** Aqua (and) Butylene glycol (and) CI 73360 (and) CI 77891 (and) Calcium Alginate (and) Gellan Gum (and) Agar (and) Phenoxyethanol (and) Propylene Glycol (and) 1,2-Hexanediol

**Physical Properties:**

Form:	Wet round spheres
Color:	Variety of colors
Odor:	Odorless or Variety of odor of actives
PH:	5.0-8.0
Particle size:	2-6mm, 9-15MM, 1-4MM
Active Payload Capacity:	0-30%

**Heavy Metal Limitation:**

Lead (Pb):	Max10ppm
Arsenic (As):	Max1ppm
Mercury (Hg):	Max1ppm

**Microbiology:**

Total aerobic microbial count:	Max.100cfu/g
Yeast and mold:	Max.100cfu/g
Escherichia coli:	Absent
Staphylococcus aureus:	Absent
Pseudomonas aeruginosa:	Absent

**Applications:**

Petals are colored aqueous gel wet microcapsules loaded with hydrophobic actives. They are bathed in the free water to keep them fresh and intact, until they are applied in formulations such as transparent essential gels, shampoos, shower gels, eye gels, lotions and creams. They are easily broken down like cream without any residues.

Petals have soft sheen like real pearls to bring radiance, nutrition, silk feeling onto the skin like never before.

Carl Hoa

☐ **Factures:**

- ☐ Wet capsules are kept in water
- ☐ Perfect spherical appearance
- ☐ Variety of matte or pearl colors (customer designed)
- ☐ Hydrophobic cosmetic actives can be incorporated
- ☐ Size available from 1-4mm, 2-6mm, 9-15MM
- ☐ Completely and easily rub-out without any residue
- ☐ Use level: 1-70% depend on the formulation

**About the stability (based on our research)**

- ☐ Petals series are stable in neutral creams, transparent gels when only neutral polymer is used such as gellan, agar, HEC, etc.
- ☐ Petals are stable in PH4-6.4 when carbomer is used as thicker. We suggest the PH should be neutralized to be between 6.0-6.5. When the PH is adjusted higher than 6.5, the softlets may swell, dissolve, or dehydration. Softlets can be soften by Alkali such as NaOH, KOH, Triethanolamine etc.
- ☐ Petals can be soften and swelled by surfactant such as Tween 20. We suggest that the concentration surfactant is not more than 1% in the formulation.
- ☐ Petals have a tendency of dehydration and shrink in the shower gel, shampoo. But the level of shrink depends on the formulation of shower gel and shampoo. The petals still keep the spherical form can be dispersed easily even the dehydration happened.
- ☐ Lotion pump head is recommend to use because it can mix and disperser better the softlets with base than airless pump head.

**How to use:**

The Petals Series can be very easily applied in formulation, Pellets suggested some simple guidelines

- ☐ Avoid adjust PH higher than 6.8 when carbomer is used as bath gel
- ☐ The free water should be completely filter out before adding the beads in the base
- ☐ Low shear mixing and filling is recommended in the process
- ☐ Easily broken by cream spray pump head
- ☐ Avoid high EDTA concentration

**Usable life and storage:**

- Keep the packing dry and well-sealed under 40°C and away from direct sunshine.
- ☐ Two years usable life without open from the date of production

**Packing:**

- ☐ This products is available in 1kg/ bottle, 10kg/carton
- ☐ Samples are available in 100g / bottle

**Limited warranty information:** (Please read carefully)

This product is neither tested nor represented as suitable for medical or pharmaceutical uses

The information contained in this document herein is believed to accurate. However, the customers use this product in which condition and methods are beyond our control. This product should be used in the substitution for customer's tests to ensure that the products are effective, safe and satisfy for the intended end use.