

### Technical Data Sheet

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Sprayspheres SC can be encapsulated with a range of vitamins, fragrances, oils etc. and also used to create visual effects in a range of personal care water-based formulations such as facial cleansers, creams, lotions, gels, emulsions, soaps etc. The beads are hard when dry and have a long shelf life without any added preservatives. They remain suspended in formulations and disappear on gentle rubbing.

**PRODUCT INFORMATION :**

<b>Product Name: SPRAYSPHERES SC (SC-WH-1004-S)</b>		
	Ingredients	CAS NO.
<b>Ingredient Declaration :</b>	<ul style="list-style-type: none"> <li>Hydroxypropyl Methylcellulose (HPMC)</li> <li>Lactose</li> <li>Microcrystalline cellulose</li> <li>Titanium Dioxide</li> </ul>	9004-65-3 63-42-3 9004-34-6 13463-67-7
<b>Country of origin : India</b>		

**ANALYTICAL INFORMATION:-**

Test	Specification
<b>Appearance</b>	Free-flowing, white coloured spheres.
<b>Solubility</b>	Partially soluble in water & insoluble in oils.
<b>Particle Size</b>	NLT 80 % should pass through 30# & NMT 20% should pass through 50#.
<b>Loss on drying</b>	NMT 8.0% w/w.
<b>Bulk Density</b>	NLT 0.6 gm/cc.
<b>pH (1 % slurry)</b>	5.0 - 8.0.
<b>Leaching Test</b>	Stable at: pH 3.0 pH 5.5 pH 8.0

**GENERAL INFORMATION:-**

<b>1.</b>	<b>Properties</b>	SC beads are hard when dry but soften in contact with at least 20 % water. They disappear on gentle rubbing when used on the skin without leaving any shell residue. Sprayspheres are stable over a wide range of pH 5.0 to 8.0, are safe and non-toxic.
<b>2.</b>	<b>Composition</b>	SC beads contain Lactose, Microcrystalline cellulose, Hydroxypropyl methylcellulose (HPMC) , Titanium Dioxide.
<b>3.</b>	<b>Absences of</b>	Impurities like glycols, dioxins, glutens, formaldehyde, residual

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	<b>Impurities</b>	solvents are absent.
4.	<b>GMO / BSE</b>	The ingredients used for manufacturing these beads are not based on animal derived source and are not of genetically modified origin.
5.	<b>CMR</b>	The products are free from any of the special risk substances classified as carcinogenic, mutagenic or toxic for reproduction.
6.	<b>Manufacturing &amp; Quality Control</b>	The entire manufacturing operations are carried out using equipment's in hygienic clean facilities to ensure high quality of final product. The quality of the products is always assured by the specifically laid down quality control practices. The well-equipped analytical laboratory ensures the use of the prescribed quality material, and follows processes in place for final analysis of the product.

**HANDLING & PROCESSING INFORMATION:-**

1.	<b>Processing of Final Product</b>	SC beads are partially soluble in water and not hygroscopic. They are hard when dry but soften in contact with at least 20% water. Avoid any ingredients that could act as solvents or cause other incompatibilities with ingredients of the Sprayspheres. There is a risk of sedimentation in all aqueous systems, surfactant products and liquid emulsions. Therefore use of mixtures containing synthetic and natural polymers is recommended as they give better results than one thickening agent alone or ensuring that the final formulation has sufficient viscosity and internal gel structure.
2.	<b>Handling</b>	Any mechanical influences on the beads should be avoided during manufacturing and filling processes. High shearing like homogenization, which is a common process for emulsifying cosmetic formulations will destroy the spheres. The beads should be only be added at the very end of the manufacturing process with slow and gentle stirring.
3.	<b>Stability</b>	Due to the inert ingredients used for manufacturing, the spheres are very stable at temperatures up to 25°C, pH-range 5 to 8. The individual stability data for Sprayspheres are available upon request. Stability studies have been carried out in different medias, the pH range stated and at two different temperatures.
4.	<b>Addition procedure</b>	Addition will be at room temperature (25°C) at the end of the process.
5.	<b>Use Level</b>	Depending on particle size and performance desired, Sprayspheres are typically used between 0.5 - 2.0 % in the final product.
6.	<b>Storage</b>	Store in a tightly closed container in dry place at temperature 25°C .
7.	<b>Safety</b>	The product is safe and non-toxic for its intended use. Avoid inhalation

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		of dust of product or contact with eyes, mouth or nose by taking suitable preventive measures. Also refer to Material Safety Data Sheet .
<b>8.</b>	<b>Shelf life</b>	3 years from the date of manufacturing .

**DISCLAIMER:-**

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