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PRESS RELEASE

**Prinova offers silicon dioxide-free infant nutrition premixes amid nanoparticle concerns**

Prinova has developed a full range of silicon dioxide-free infant nutrition premixes as concerns grow about the health impact of nanoparticles.

Silicon dioxide nanoparticles are commonly used in infant nutrition premixes as anticaking agents for fat-soluble forms of vitamins.

Scientific research has indicated that silicon dioxide nanoparticles could have numerous health consequences, with studies suggesting infants may be particularly susceptible.<sup>1</sup>

Nanoparticles are the width of no more than 10 atoms.<sup>2</sup> As a result of their size, they are more likely than larger particles to enter cells, tissues and organs.<sup>3</sup>

Research shows that, once inside the body, nanoparticles have unconstrained access to the brain, liver, kidneys, spleen and lungs.<sup>4</sup>

Clinical studies suggest silicon dioxide nanoparticles could induce severe pathological consequences in the developing brain.<sup>5</sup> <sup>6</sup> There are also concerns about their impact on gastrointestinal health and function<sup>7</sup>, the liver<sup>8</sup>, lungs<sup>9</sup>, kidneys<sup>10</sup> and spleen.<sup>11</sup>

To provide complete reassurance, Prinova has developed a full range of vitamin, mineral and amino acid infant nutrition premixes that are 100% silicon dioxide-free.

In addition, the company offers vitamin E (50%), vitamin D3 (100) and vitamin K1 (5%) without silicon dioxide, ensuring they are entirely free from any nanoparticles.

Xavier Pollono, Prinova's Sales Director for Europe and APAC, said: "Studies have raised concerns about silicon dioxide nanoparticles' effect on health, with infants feared to be especially vulnerable. As regulators and parents become more aware of the risks, manufacturers have every reason to ensure their infant nutrition products are safe. Prinova offers custom dry blends for infant formulas, follow-on milks and other fortified foods that are completely free from silicon dioxide, providing a solution that consumers can trust."

Prinova has published a white paper, 'A serious concern: Silicon dioxide nanoparticles in infant nutrition premixes', to highlight the range of potential risks associated with their use. It is available at: <https://www.prinovaeurope.com/news/nano-particles-free-for-infant-nutrition/>

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### **About Prinova Europe**

Prinova is leading global supplier of ingredients and premix manufacturing solutions for the food, beverage and nutrition industries. Prinova holds strategic stocks in numerous distribution centres around the world to ensure continuity of supply and has liquid and dry premix manufacturing facilities in the UK, China and the USA. Prinova's premix business is underpinned with over 40 years of experience in ingredient sourcing and distribution, servicing their customers with global inventories, market expertise and leading market positions in Vitamins, Amino Acids, Sweeteners, Preservatives, Proteins, Aroma Chemicals and more.

For more information visit: [www.prinovaeurope.com/](http://www.prinovaeurope.com/)

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<sup>2</sup> The Lancet 'The risks of nanotechnology for human health' (2007)

<sup>3</sup> Friends of the Earth 'Nano-particles in baby formula: Tiny new ingredients are a big concern' (2016)

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<sup>6</sup> Fu, J. et al. 'Silica nanoparticle exposure during the neonatal period impairs hippocampal precursor proliferation and social behavior later in life' International Journal of Nanomedicine (2018)

<sup>7</sup> Guo, Z. et al. 'Silicon dioxide nanoparticle exposure affects small intestine function in an in vitro model' Nanotoxicology (2018)

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