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Product Information

Product ID R1879 CAS No. 79-81-2

Chemical Name

Synonym Vitamin A palmitate, Retinyl hexadecanoate, Aquasol A

Formula C₃₆H₆₀O₂ Formula Wt. 524.86 Melting Point 28°C

> Purity ≥1.70 MIU/g, bio assay Solubility Insoluble in water. Soluble in chloroform, ether, edible oils. Slightly soluble in

> > alcohol.

Store Temp 4°C Ship Temp Ambient

Description Retinyl palmitate is the ester of retinol and palmitic acid; it exhibits anti-metastatic and antioxidative activities. Retinyl palmitate is commercially used as a vitamin A supplement but it does not directly activate retinoic acid receptors (RARs) like other forms of vitamin A. In animal models of colon cancer, retinyl palmitate decreases cancer metastasis. In cellular models, this compound prevents oxidation of LDL. Retinyl palmitate displays both mutagenic as well as anticancer activities in various models; in one model, it induces DNA damage under UV light, and in another model it inhibits the proliferation of cancer cells.

> This compound is packaged as a water-dispersable solid in a gelatin base; it has > 1% BHA,BHT, & α-Tocopherol added as preservatives. Retinyl palmitate is not as stable as retinyl acetate in pure form. 250,000 USP units per gram.

References Park EY, Pinali D, Lindley K, et al. Hepatic vitamin A preloading reduces colorectal cancer metastatic multiplicity in a mouse xenograft model. Nutr Cancer. 2012;64(5):732-40. PMID: 22642873.

> Mei N, Xia Q, Chen L, et al. Photomutagenicity of retinyl palmitate by ultraviolet a irradiation in mouse lymphoma cells. Toxicol Sci. 2005 Nov;88(1):142-9. PMID: 16107546.

Maziere S, Cassand P, Narbonne JF, et al. Vitamin A and apoptosis in colonic tumor cells. Int J Vitam Nutr Res. 1997;67(4):237 -41. PMID: 9285252.

Livrea MA, Tesoriere L. Bongiorno A, et al. Contribution of vitamin A to the oxidation resistance of human low density lipoproteins. Free Radic Biol Med. 1995 Mar; 18(3):401-9. PMID: 9101230.

Bulk quanitites available upon request

Product ID Size R1879 25 g R1879 100 q

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.