PRODUCT DATA SHEET

Docosahexaenoic acid (all cis-4,7,10,13,16,19)

Catalog number: 1136
Common Name: DHA; C22:6 (all cis-4,7,10,13,16,19) omega-3 fatty acid
Source: natural, plant
Solubility: ethyl ether, hexane, methylene chloride, ethanol, DMSO, DMF
CAS number: 6217-54-5

Molecular Formula: C_{22}H_{32}O_{2}
Molecular Weight: 328
Storage: -20°C
Purity: TLC 99%, GC 99%
TLC System: hexane/ethyl ether/acetic acid (85:15:1 by vol.)
Appearance: liquid

Application Notes:
This product is an ideal standard for analysis and for use in biological systems. Docosahexaenoic acid (DHA) is a major component of fish oils, animal phospholipids, and algae. Supplements of this acid are widely popular due to possible improvements in cognitive and behavioral functions, sight defects, inflammation disorders, and cancer. It is essential to many neurological functions and is present in very high levels in the mammalian brain, brain synaptosomal plasma membranes and synaptic vesicles. It is essential for the early neural development of mammals and it inhibits the prostaglandin synthase-cyclooxygenase enzymes. DHA is the precursor of the docosanoids which have potent anti-inflammatory and immuno-regulatory actions. In the retina it is a major structural component of the photoreceptor outer segment membranes. DHA can depress prostaglandin E₂ production and, along with EPA, has been shown to cause a significant growth inhibition of human lung carcinoma.

Selected References:

This product is to be used for research only. It is not intended for drug or diagnostic use, human consumption or to be used in food or food additives. Matreya assumes no liability for any use of this product by the end user. We believe the information, offered in good faith, is accurate.