

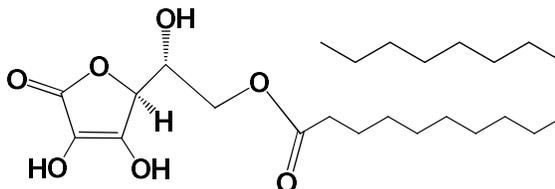
L-Ascorbyl 6-stearate

Catalog number: R-1218

Molecular Formula: $C_{24}H_{42}O_7$

MW: 442.59

CAS: 10605-09-1



Alternate Names: 6-O-Stearyl-L-ascorbic acid, Ascorbyl stearate, L-Ascorbyl 6-octadecanoate, Ascorbyl monooctadecanoate, L-Ascorbic Acid, Vitamin C stearate, INS No. 305

Solubility: Soluble in alcohol; insoluble in water

Storage and Handling: Store at room temperature. Keep in a dry place. Keep container tightly closed in a dry and well-ventilated place. Provide appropriate exhaust ventilation at places where dust is formed.

Background: Ascorbyl stearate is a fatty acid ester formed from ascorbic acid and stearic acid. In addition to its use as a source of vitamin C, it is used as an antioxidant food additive in margarine. The USDA limits its use to 0.02% individually or in conjunction with other antioxidants.

References:

<https://pubchem.ncbi.nlm.nih.gov/compound/L-Ascorbic-acid-monostearate#section=Metabolite-References>

1. Jiang, C. Lu, Y., Li, Z., Li, C., Yan, R., "Enzymatic Synthesis of L-ascorbyl Fatty Acid Esters Under Ultrasonic Irradiation and Comparison of Their Antioxidant Activity and Stability", *Journal of Food Science* (2016), 81(6), C1370-C1377.

DOI:10.1111/1750-3841.13317

2. Frungillo, F., *et al.*, "Targeted antitumoral dehydrocrotonin nanoparticles with L-ascorbic acid 6-stearate", *Journal of Pharmaceutical Sciences* (2009), 98(12), 4796-4807. DOI:10.1002/jps.21760

Hazardous Properties and Cautions: The toxicological and pharmacological properties of this compound are not fully known. For further information see the MSDS on request. This product is manufactured and shipped only in small quantities, intended for research and development in a laboratory utilizing prudent procedures for handling chemicals of unknown toxicity, under the supervision of persons technically qualified to evaluate potential risks and authorized to enforce appropriate health and safety measures. As with all research chemicals, precautions should be taken to avoid unnecessary exposures or risks.

Warranty and Disclaimer: Echelon warrants the product conforms to the specifications stated herein. In the event of nonconformity, Echelon will replace products or refund purchase price, at its sole option, and Echelon shall not be responsible for any other loss or damage, whether known or foreseeable to Echelon. No other warranties apply, express or implied, including but not limited to warranty of fitness for any purpose or implied warranty of merchantability. Purchaser is solely responsible for all consequences of its use of the product and Echelon assumes no responsibility therefore, including success of purchaser's research and development, or health or safety of any uses of the product.