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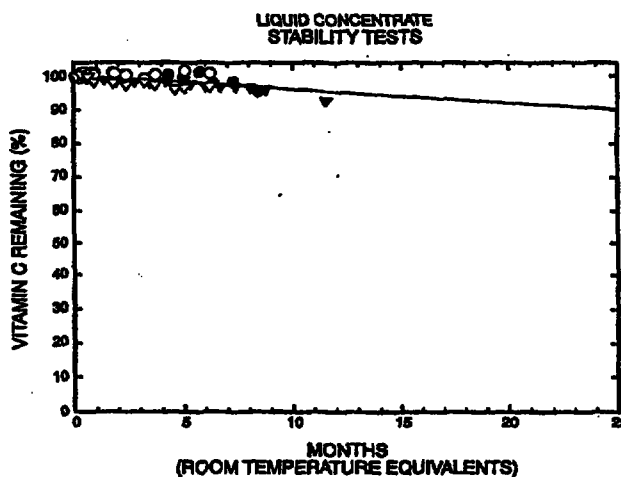
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(54) Title: STABLE LIQUID MINERAL ASCORBATE COMPOSITIONS AND METHODS OF MANUFACTURE AND USE



(57) Abstract

Liquid vitamin C concentrate compositions comprise a mineral ascorbate and a pharmacologically acceptable liquid organic polyol solvent for the mineral ascorbate, the concentrate having a pH between about 5 and 7. The concentrate may also contain an aldonic compound and/or a pharmacologically acceptable zinc compound. The concentrate compositions are prepared by heating the solvent at 50–90 °C and mixing the ascorbate and/or aldonic compound and/or zinc compound into the heated solvent, preferably in the absence of oxygen. The concentrate compositions are also characterized as a composition which comprises the reaction product of a mineral ascorbate and a pharmacologically acceptable liquid organic polyol solvent and, optionally, an aldonic compound and/or a soluble non-toxic zinc compound, which reaction product includes 4-hydroxy-5-methyl-3(2H)-furanone and/or 3-hydroxy kojic acid. Finished vitamin C products, characterized by excellent long term vitamin C stability, are conveniently prepared by incorporating the concentrates into finished cosmetic, medical and food products.