

Tinosan SDC, also known as Citric Acid & Silver Citrate, is a new anti-microbial based on a stabilized silver complex produced by a unique electrochemical process with silver and citric acid. Tinosan SDC provides a broad spectrum anti-microbial activity and is effective against unwanted skin bacteria and pathogenic micro organisms. It's fast-killing activity makes Tinosan SDC an effective anti-microbial for home & personal care products.

Tinosan SDC shows good compatibility in most formulations at pH <7 with anionic and non-ionic surfactants, emulsifiers and with amphoteric surfactants. Tinosan SDC is compatible with many other anti-microbial actives including Irgasan® DP 300 and most preservatives. Combination of Tinosan SDC with cationic ingredients and incorporation in formulations with pH above 7 should be avoided. Exposure of Tinosan SDC or Tinosan SDC -containing formulations to light should be avoided and the product preferably be stored in containers that provide protection against light. Final formulations should be tested on light stability in case they are sold in transparent packaging.

Tinosan SDC is anionic and is not compatible with cationic ingredients such as BTMS, OCS (One Step Conditioner), or CR (Crème Rinse).

Tinosan SDC is highly water soluble and easy to incorporate into the aqueous phase of gels, surfactants and emulsions made by a cold process. In the manufacturing of emulsions produced by hot processes, the anti-microbial active should preferably be added to the final formulation after the emulsion has cooled down. For formulations sensitive to acids, Tinosan SDC can be pre-neutralized prior to addition to the product. Exposure of Tinosan SDC to pH's higher than 7 and temperatures above 50°C should be avoided in order to achieve optimal formulation stability. High salt concentrations can reduce the bactericidal activity whereas anionic surfactants in a concentration of 0.03% to 1% increase the biocidal efficacy of Tinosan SDC .

Usage Guidelines:

Skin Care products 0.1% - 0.3%
Home Care products 0.1% - 0.5%

INCI: Citric acid (and) silver citrate.