



SMART™ Guard C-Silver

Benefits:

SMA'RT Guard C-Silver provides a broad-spectrum antimicrobial activity and is effective against skin bacteria and pathogenic microorganisms. Its fast-killing activity makes SMA'RT Guard C-Silver an effective antimicrobial for personal care products. As a stand-alone preservative, it is used at 0.2 – 1.5% and can be combined with other preservatives if needed. SMA'RT Guard C-Silver will not migrate into the oil phase of emulsions, thus maintaining strong efficacy against microorganisms in the water phase.

Key Attributes:

- Formaldehyde Free
- Paraben Free
- Broad spectrum
- No oil-phase migration
- Low level of use

Applications:

- Creams & Lotions
- Gels & Serums Products
- Body Sprays and Mists
- Shower Gels and Shampoos
- Acne Products
- Dandruff Products
- Body & foot deodorant
- Wet wipes
- Hand sanitizers
- Intimate hygiene

INCI: Colloidal Silver

Functions: Antimicrobial

Suggested use level: 0.2 - 1.5%

Appearance: Yellow to brown liquid, odorless

Solubility: Soluble in water. Miscible in Ethanol, Glycerin and Pentylene Glycol

pH(1% water): 6-9

Formulation Guidelines:

1. SMA Collaboratives advises using a chelating agent in final formulations
2. SMA'RT Guard C-Silver is very water soluble and should be added to the aqueous phase of gels, surfactants and cold process emulsions
3. For hot process emulsions, it should be post added during cooling phase below 50°C.
4. Amphoteric surfactant and/or AP helps to handle the electric charges in the system.
5. Additional preservatives may be required to enhanced yeast and mold preservation-See SMA Collaboratives complete line of SMA'RT Guard preservatives