

ANTIPERSPIRANT STICK

RAW MATERIALS	% By Weight
Rehydrol II Aluminum Chlorohydrate	20.0
Stearamide MEA	15.0
Propylene glycol	30.0
EMEREST 2486 Pentaerythrityl Tetrapelargonate	15.0
ETHOXYOL 1707 Emulsifying Acetate Ester	8.0
Deionized water	10.4
Cab-O-Sil Fumed Silica	1.0
EMERESSENCE 1150 Ethylene Brassylate	0.6

EMEREST 2486 reduces the dragging effect of the stick across the skin to make application smooth but not greasy.

## Procedure:

Combine Rehydrol, propylene glycol, EMEREST 2486 and Cab-O-Sil with high speed stirring. Continue stirring and heat to 80C. Slowly add stearamide MEA at 80C and stir until dissolved. Heat water to 80C and add slowly to the mixture. Continue stirring for 30 minutes. Add ETHOXYOL 1707 and EMERESSENCE 1150, stirring until homogeneous. Pour into sticks at 60C.

SOURCE: Emery Chemicals: EMEREST 2486: Formulation 2743-001

DRY ANTIPERSPIRANT STICK

RAW MATERIALS	% By Weight
Cyclomethicone	39.7
Stearyl Alcohol	22.0
Arlacel 165	2.0
Titanium Dioxide 3328	0.2
BENTONE GEL VS-5 Rheological Additive	10.0
Aluminum Chlorohydrate (Micronized)	25.0
Talc	1.0
Fragrance	0.1

## Manufacturing Directions:

- A. Heat the Cyclomethicone to 65C.
- B. With stirring, slowly add ingredient 2, maintaining at 65C thru step E.
- C. When all of ingredient 2 is melted, add ingredients 3 and 4. Mix for 15 minutes.
- D. Add BENTONE GEL VS-5 Rheological Additive and mix for 30 minutes.
- E. Add ingredients 6 and 7, mix for 30 minutes.
- F. Allow the batch to cool to 55C, add Fragrance, mix for 5 minutes and pour into suitable containers.

SOURCE: NL Chemicals: Suggested Formulation