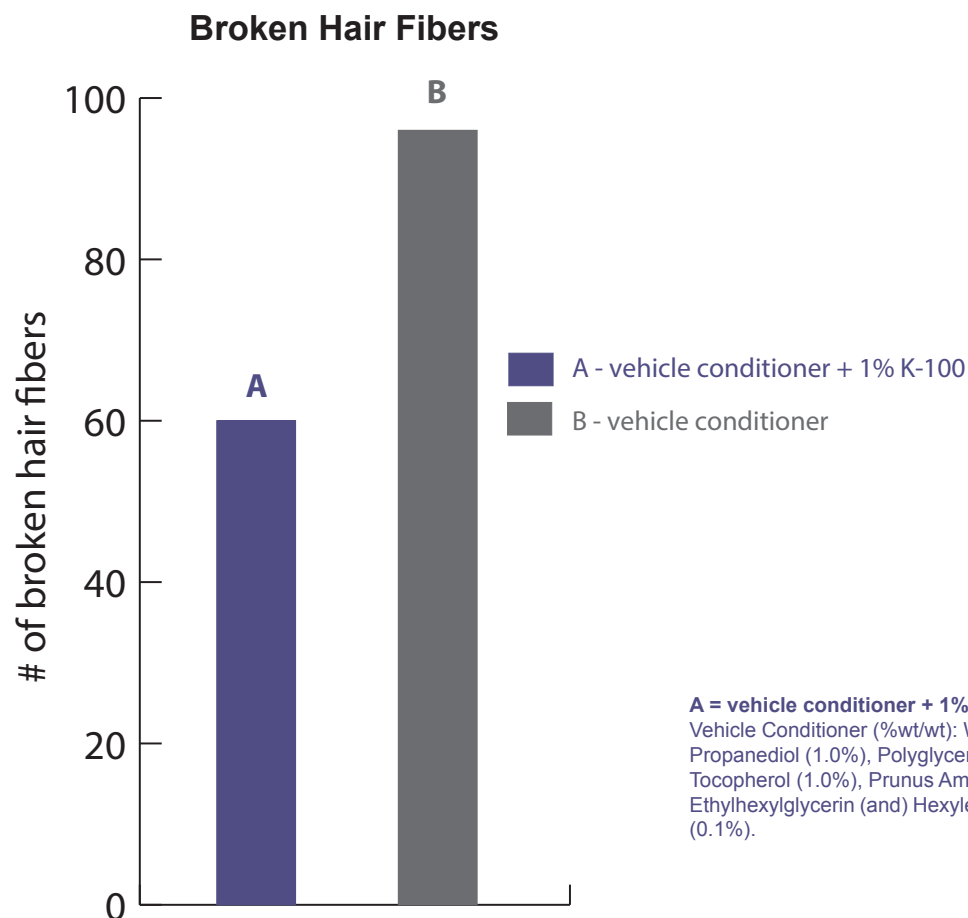




## Floraesters K-100 Jojoba in a Conditioner Reduces Hair Breakage by 38% After Heat Exposure



**A = vehicle conditioner + 1% Floraesters K-100 Jojoba / B = vehicle conditioner**

Vehicle Conditioner (%wt/wt): Water (q.s.), Glyceryl Stearate (and) Cetearyl Alcohol (and) Sodium Stearoyl Lactylate (6.0%), Cetyl Alcohol (2.0%), Propanediol (1.0%), Polyglyceryl-2 Stearate (1.0%), Ethylhexyl Methoxycinnamate (and) BHT (1.0%), Theobroma Grandiflorum Seed Butter (and) Tocopherol (1.0%), Prunus Amygdalus Dulcis (Sweet Almond) Oil (1.0%), Ethyl Macadamiate (1.0%), Phenoxyethanol (and) Caprylyl Glycol (and) Ethylhexylglycerin (and) Hexylene Glycol (0.8%), Fragrance (0.5%), Tocopheryl Acetate (0.5%), Hydroxyethylcellulose (0.1%), and Disodium EDTA (0.1%).

### Objective:

To evaluate the potential of Floraesters K-100 Jojoba to prevent heat-damaged hair from breakage (*i.e.* heat protection) when used in a rinse-out hair conditioner.

### Method:

Conditioners with and without 1% Floraesters K-100 Jojoba were applied to curly hair tresses, followed by heat exposure. Breakage was determined after 1000 controlled comb strokes.

### Results:

The conditioner containing 1% Floraesters K-100 Jojoba **produced 38% fewer broken hair fibers after heat exposure** when compared to the vehicle.



**Floratech Ingredient:  
Floraesters K-100 Jojoba**

The *ex vivo* study of Floratech® test formulation (CTL\_15-060) was conducted on (n=9 per test article) double-bleached naturally curly, dark brown, six inch long hair tresses (DeMeo Brothers Inc.) that were washed with a 10% sodium lauryl sulfate solution. After 90 passes with a flat iron at 450°F (232°C), hair tresses were treated with 0.5 ml of the test article. Ten additional flat iron passes were made post conditioner treatment, rinse, and blow drying. Tresses were then exposed to humidity (>75%) for four hours, and breakage analysis was performed after 1000 controlled comb strokes. The study was blinded, and carried out under controlled temperature and humidity conditions. The inclusion of Floraesters K-100 Jojoba resulted in statistically significant ( $p < 0.05$ ) reductions in breakage compared to the vehicle. (Clinical Study 15-060 - Phase IV report available upon request.)