



Kostol
TMC-25

PLANT BASED CONDITIONING EMULSIFIER

Kostol TMC-25 is a plant based, cationic oil-in-water emulsifier designed for both hair and skin care formulation. Developing emulsions with cationic systems offers better adhesion to hair and skin. In each case, Kostol TMC-25 will emulsify and thicken your system.

Key Features & Benefits

- Emulsification
- Thickening
- Conditioning
- Anti-Static Agent
- Detangling
- Sulfate-Free
- Frizz Control
- PEG-Free
- RSPO



Applications

Kostol TMC-25 is a versatile emulsifier that can be used in both hair and skin care for leave-on and wash-off applications.

Hair Care

Provides conditioning, detangling, static control and frizz reduction.

- Conditioners
- Detanglers
- Hair Bleach
- Hair Colors
- Shampoo
- Sprays
- Styling
- Masks
- Treatments

Skin Care

Provides emulsification and skin conditioning with a silky, non-greasy after-feel. Perfect for shave preparations.

- Emulsions
- Shave Products
- Skin Care

Clean Beauty

Approved for use* with leading brands including but not limited to: Clean at Sephora, Credo Beauty and Whole Foods Premium Body Care.

Product Characteristics

INCI:	Cetearyl Alcohol (and) Behentrimonium Chloride
Typical Usage Levels:	1-10%
Form:	White Pastille
Active Level:	25%
Package:	25KG Box

Formulation Guidelines

There are some key points to remember when formulating with cationic emulsifiers. Cationic chemistry is typically incompatible with anionic products. They are characteristically not compatible with certain acrylate copolymers, xanthan gums and CMC thickeners as well as other anionic products. Keep in mind the active content as you formulate both leave-on and wash-off products and coordinate with your regulatory team for the rules based on the country of distribution.



Suggested Use Levels

Wash-Off Systems: 2.0 - 10.0%

Leave-On Systems: 0.5 - 8.0%

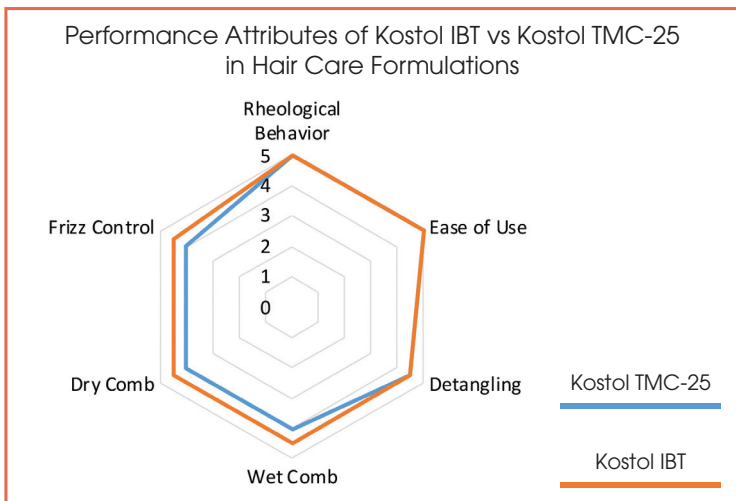
Citrus Hair Masque

Ingredient Trade Name	INCI Name	%
Phase A		
Deionized Water	Aqua	70.5
Jaguar C-17	Guar Hydroxypropyltrimonium Chloride	0.5
Glycerin	Glycerin	5.0
Optiphen ND	Phenoxyethanol, Benzoic Acid, Dehydroacetic Acid	1.0
Phase B		
Kostol TMC-25	Cetearyl Alcohol (and) Behentrimonium Chloride	8.0
Kester Wax K-24	Lauryl Laurate	6.0
Kester Wax K-48	Cetyl Palmitate	4.0
Orange Wax	Citrus Aurantis (Orange) Peel Wax	1.0
Hemp Seed Oil	Cannabis Sativa (Hemp) Seed Oil	4.0

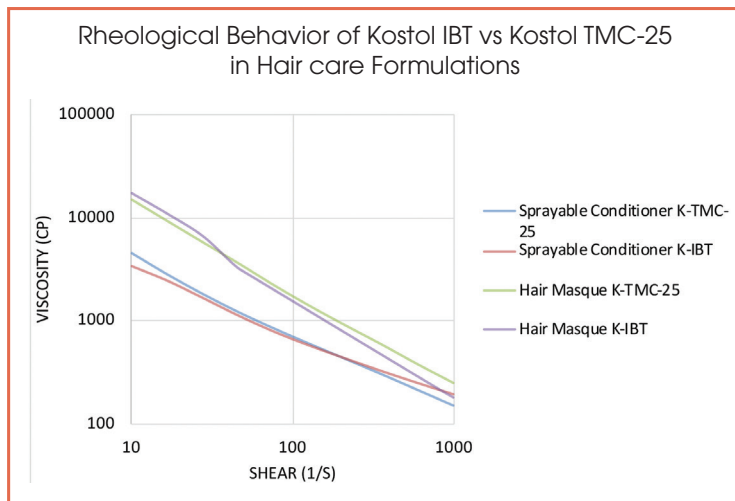
Behentrimonium Chloride Vs Behentrimonium Methosulfate

Formulators who need to replace a cationic conditioner for an approved INCI nomenclature can count on Koster Keunen. Using Kostol TMC-25 supports marketing requirements on the INCI declaration, without substantial changes to your formulation or its performance. Our laboratory results show that 1:1 replacement in all tested formulas, were equivalent in rheology profiles and performance.

Sensory Evaluation In Formulation:



Rheology Evaluation



Conclusion

Laboratory evaluations show that in multiple formulations, Kostol TMC-25 (Behentrimonium Chloride) is equivalent when replacing Behentrimonium Methosulfate in formulas at a 1:1 ratio.

Reviewing Volatile Content in Quaternary Emulsifiers

Kostol TMC-25 is unique: created without volatile materials like other Behentrimonium chloride emulsifiers you find on the market. The removal of flammable and volatile content ensures safety in the lab, production, and reduces regulatory issues for markets that prohibit these additives. Koster Keunen research shows Kostol TMC-25 without volatile content while other manufactures still contain it. Further studies show that Kostol TMC-25 is a functional equivalent to other products with the same INCI name while being a safer option.

Study	Experiment	Kostol TMC-25	Alternate MFGs
Volatile content	Weight loss at 90 °C	<1%	7%

Koster Keunen Offers a Range of Emulsifiers for All of Your Formulation Requirements.

Contact Us Today for Further Information.