Itaconix
Polymers for Better Living™

ITX ROC 209

Rinse-Off Hair Conditioner

Add 100% bio-based Itaconix® VELASOFT™ to hair conditioners for lubricity and wet & dry combing that leaves hair feeling naturally soft and silky.

	#	INCI Name, *Trade Name*	Function	%W/W
A	1	DI Water	Diluent	84.70
	2	Acrylates/C10-30 Alkyl Acrylate Crosspolymer *Carbopol® Ultrez 21*	Rheology Modifier	0.35
	3	Hydroxyacetophenone *Symsave® H*	Preservative	0.50
	4	Glycerol 99%	Humectant	1.00
	5	Phenoxyethanol	Preservative	0.50
	6	**Sodium Polyitaconate** ***Itaconix® VELASOFT™***	**Hair Conditioner**	**1.00**
B	7	Potassium Cetyl Phosphate, Hydrogenated Palm Glyceride *Emulsiphos®*	Emulsifier	3.00
	8	Cetearyl Alcohol *Vegarol® 1618 TA*	Emulsifier	4.50
	9	Cyclomethicone *BSI Cosmetic Silicone CPS D5*	Emollient	3.00
	10	Cetearyl Ethylhexanoate, Isopropyl Myristate *PCL Liquid*	Emollient	1.00
	11	Vitamin E Acetate	Benefit Agent	0.10
C	12	20% Sodium Hydroxide Solution	pH Adjuster	0.25
	13	Amodimethicone *Belsil® ADM 1650*	Anti-Static Agent	0.10

Product Properties:

Appearance	Thick cream
pH	5.3 – 5.5
Viscosity	35,000 cps

Procedure:

1. Heat water to 65°C and mix to create a vortex.
2. Add Carbopol® (2) and mix until fully dispersed.
3. Add SymSave® (3), Glycerol (4), and Phenoxyethanol (5).
4. Add Itaconix® VELASOFT™ (6) and mix until dissolved.
5. Ensure all ingredients are fully dispersed / dissolved and the phase is clear.
6. In a second container, combine ingredients 7-11 and heat to 70°C.
7. When both phases are at 70°C, combine (add oil to water) and transfer to homogenizer.
8. Homogenize until uniformly opaque, then transfer to overhead mixer and add Sodium Hydroxide (12) at 60°C.
9. Continue cooling to 50° and incorporate Belsil® (13) with moderate mixing.
10. Measure pH and adjust to target with Sodium Hydroxide (12) if needed.

Supplier References:

Itaconix Corporation (6)	Lubrizol (2)	Symrise (3, 7, 10)
VVF (8)	Brentag (9,13)	Essential Ingredients (11)