



STYLED
MAZECARE™
style polymer by **DOW**

**DERIVED FROM NATURE,
BACKED BY SCIENCE.**



 **Univar**Solutions





WE DIDN'T CHOOSE
THE CURLY LIFE,

THE CURLY LIFE CHOSE US.

We love our waves, curls, spirals, ringlets, kinks and coils. Our hair helps define us, and helps us stand out from the crowd, but it takes a lot to manage these tresses and keep them bouncing every day.

We want effective products with natural ingredients to help style our curls, keeping them healthy and happy.

That's why we created STYLED with MaizeCare™ Style Polymer, designed to address our top curl concerns.

GET TO KNOW THE MAIZECARE™

style polymer by 

STYLE POLYMER

HOW CAN CORN ENABLE CURLS THAT LAST ALL DAY?

Clean beauty is here to stay, and the demand for clean, transparent products continues to grow across all applications, including hair care. In 2019, hair care made up 23% of global clean beauty product launches (Mintel), and that number is expected to continue to grow.

Opportunities exist for brands to develop clean and eco-friendly hair styling products that leverage biobased ingredients without sacrificing on performance or benefits. We know, we know, it sounds too good to be true. We thought so too, until we put Dow's MaizeCare™ Style Polymer to the test. As a biobased hair fixative, MaizeCare™

Style Polymer was designed to help formulators create naturally-derived products with exceptional performance.

MaizeCare™ Style Polymer is derived entirely from corn and provides a variety of styling benefits in haircare formulations. Primarily, MaizeCare™ Style Polymer acts as a transparent film-former and styling aid that performs exceptionally across a wide range of products, helping to create customizable hold levels with excellent aesthetics and durability.

MaizeCare™ Style Polymer is developed using corn and leveraging patented mechanical and thermal transformation to create a highly versatile polymer that can be used in styling products from creams to gels and sprays to deliver the results curly-haired consumers (like us) are looking for.



MaizeCare™ Style Polymer

We rigorously tested each of the STYLED with MaizeCare™ Style Polymer formulations, and found that MaizeCare™ Style Polymer increased the performance and enhanced the key curl benefits.

Whether you're looking to hold, boost, tame or define curls—MaizeCare™ Style Polymer is the answer.

MAIZECARE™ STYLE POLYMER BENEFITS

- Provides excellent curl retention over 8 hours
- Maintains humidity resistance over 8 hours
- Delivers frizz control
- Improves style durability
- Enhances volume
- Provides sebum absorption*
- Comes in an easy-to-disperse powder
- Compatible in water-based formulations with many other components including emulsifiers, gelling agents, fatty alcohols, naturally-derived emollients, oils, extracts and more
- Comparable performance to synthetic film formers, with added benefit of being non-hygroscopic

PROPERTIES

NCI name	Hydrolyzed Corn Starch
Appearance	Off-White Powder
Use Levels, %	0.5-5%
Shelf Life	24 months
China compliant	Yes
Percent moisture	5.0-10.0
Brookfield viscosity (25% solids at RT)	1150-1650 cps

*formulation dependent

FORMULATING FOR THE CLEAN BEAUTY CONSUMER

100%

Natural Origin
Content
ISO 16128



COSMOS APPROVED

Ecocert & COSMOS
Approved



Halal



Readily
Biodegradable



Vegan



Certified
Non-GMO
Source

STYLED WITH
 MAIZECARE™ STYLE POLYMER
 OFFERS YOU 5 PRODUCTS
 DESIGNED TO ADDRESS
 THE KEY CURLY HAIR
 CONCERNS:



DEFINE
 with
 MaizeCare™ Style Polymer
Molding Clay

98.1%
 naturally-derived



HOLD
 with
 MaizeCare™ Style Polymer
Styling Gel

99.9%
 naturally-derived



CONTROL
 with
 MaizeCare™ Style Polymer
Curl Cream

99.3%
 naturally-derived



BOOST
 with
 MaizeCare™ Style Polymer
Sugar Spray

100%
 naturally-derived



TAME
 with
 MaizeCare™ Style Polymer
De-frizz Wand

95.7%
 naturally-derived



Define

Molding Clay

Oh, hey there little baby curls! Don't worry, we've got you covered with our DEFINE Molding Clay. Natural waxes help provide the definition you're craving, with just enough hold to keep them that way for the whole day. Just a little will help you shape every curly strand, no matter how tiny or long.



In this formulation, we paired the versatile MaizeCare™ Style Polymer with:

Black Iron Oxide Castor Oil Dispersion (COD-8004)
Vibrant black pigment pre-dispersed in easy-to-use natural oil base.

PHASE	INGREDIENT	INCI	SUPPLIER	WT%
A	Deionized Water	Water		44.95
	Kalama® Sodium Benzoate NF/FCC	Sodium Benzoate	Univar Solutions/ Emerald	0.50
	Protectol® PE NA	Phenoxyethanol	BASF	0.80
	MaizeCare™ Style Polymer	Hydrolyzed Corn Starch	Univar Solutions/ Dow	3.00
B	White Beeswax Pastilles	Cera alba (Beeswax)	Strahl & Pitsch	7.00
	Candelilla Wax	Candelilla Wax	Strahl & Pitsch	2.00
	Carnauba Wax #1 Flakes NF	Carnauba Wax	Strahl & Pitsch	2.00
	Olivem® 1000	Cetearyl Oliviate (and) Sorbitan Oliviate	Hallstar	10.00
	SustOleo™ BA	Brassica Alcohol	Univar Solutions/ Inolex	3.00
	Mackaderm® COCOA	Myristyl Oleate (and) Myristyl Palmitate (and) Myristyl Stearate	Univar Solutions/ Solvay	2.00
	Mackaderm® LIA	Isoamyl Laurate	Univar Solutions/ Solvay	7.00
	Lexol™ GT-865	Caprylic/Capric Triglyceride	Univar Solutions/ Inolex	7.00
	Black Iron Oxide Castor Oil Dispersion (COD-8004)	Iron Oxide Black (CI 77499) (and) <i>Ricinus communis</i> (Castor) Oil	Univar Solutions/ SunChemical	0.15
	Really Ugli Mon Fragrance ORC1600271	Fragrance	Orchidia®	0.60
D	Deionized Water	Water		6.00
	Kaolin Clay TH-1 Cosmetic Grade Powder	Kaolin	Univar Solutions	3.00
E	Citric Acid, Anhydrous USP/FCC	Citric Acid (33% solution)	Univar Solutions	0.50
	Deionized Water	Water		0.50
				100.00

PROCEDURE

- Charge main vessel with water and add phase A ingredients with mixing.
- Begin heating phase A to 90°C.
- Combine phase B ingredients. Heat to 90°C with mixing to melt all solids.
- Once A and B are at temperature, add phase B to A with mixing.

- Let AB cool to 55°C with mixing.
- At 55°C, add phases C-D sequentially with mixing.
(Note: combine phase D ingredients and mix to fully wet clay and form a slurry.)
- Adjust to pH 5.3 - 5.5 with phase E; q.s. to 100% with water.

PROPERTIES

pH 5.3 - 5.5
% Naturally-derived = 98.1%
Viscosity=1,250,000 cP (T-F, 0.5 rpm, 25°C)
Color: light gray



MaizeCare™ Style Polymer Results



DEFINE Molding Clay containing 3% MaizeCare™ Style Polymer provided better hold and an improved application feel, compared to a commercial benchmark.

Panelist reported high friction feel on hair during application and loss of hold after a few hours with the commercial benchmark containing VA/ Crotonates/Vinyl Neodecanoate Copolymer.

DEFINE Molding Clay

Less frizz
Strong hold

Commercial Benchmark

More frizz
Loss of hold



Hold Styling Gel

We're not messing around with our HOLD Styling Gel. Lock those curls in place exactly where you want them and know they'll still be right there hours later. This natural water-based gel is the perfect weight and density for curls of all textures.

In this formulation, we paired the versatile MaizeCare™ Style Polymer with:

Natapres® GS
Combination of grape extract and ferment release antimicrobial to naturally preserve cosmetic formulations.

PHASE	TRADE NAME	INCI	SUPPLIER	WT%
A	Deionized Water	Water		50.00
	MaizeCare™ Style Polymer	Hydrolyzed Corn Starch	Univar Solutions/ Dow	2.00
B	Deionized Water	Water		39.72
	Chamolie Fragrance ORC0802494	Fragrance	Orchidia®	0.10
	Natapres® GS	Lactobacillus Ferment (and) Vitis vinifera (Grape) Seed Extract	Univar Solutions/ PCCA	2.00
	Zemea® Propanediol	Propanediol	Dupont Tate & Lyle Bioproducts	3.50
C	Zeastat™	Caprylhydroxamic Acid (and) Propanediol	Univar Solutions/ Inolex	1.00
	Jaguar® HP-105	Hydroxypropyl Guar	Univar Solutions/ Solvay	0.42
		Xanthan Gum	Univar Solutions	1.26
				100.00

PROCEDURE

1.

Add MaizeCare™ Style Polymer to mixing water; begin heating to 50°C, and mix 30 minutes to fully hydrate.
2.

Stop heating and add phase B ingredients to phase A with mixing.
3.

In a separate vessel, combine phase C ingredients and mix to form a slurry.
4.

Add phase C to AB with mixing, increasing mixing speed as polymers hydrate and thicken. Mix 30 minutes to fully hydrate.

PROPERTIES

pH 6.3-6.5
% Naturally-derived = 99.9%
Viscosity= 140,000 at 0.5 rpm
13,000 at 20 rpm
Color: hazed, yellow tinged gel



MaizeCare™ Style Polymer Results



HOLD Styling Gel 2% MaizeCare™ Style Polymer provided less frizz and better definition than the base gel without MaizeCare™ Style Polymer. Results showed humidity resistance, after 5 hours in 65% relative humidity.

HOLD Base Gel

More frizz
Less hold

HOLD Styling Gel
2% Maizecare™ Style Polymer

Less frizz
Better
definition



Control

Curl Cream

Love your curls and let them live their best life! Our CONTROL Curl Cream adds moisturization and gives your hair that extra TLC it needs without compromising on styling benefits. This natural curl cream is easy to spread on wet hair, and will quickly become your go-to product to embrace your natural curly style.

In this formulation, we paired the versatile MaizeCare™ Style Polymer with:

D-Panthenol 75L
The gold standard moisturizer for skin and hair care, pro-vitamin B5 also offering anti-inflammatory effects and soothes irritated and sensitive skin and scalp.

PHASE	TRADE NAME	INCI	SUPPLIER	WT%
A		Water, DI		74.976
	MaizeCare™ Style Polymer	Hydrolyzed Corn Starch	Univar Solutions/ Dow	2.00
	Glycerin, USP	Glycerin	Univar Solutions	2.00
	Spectrastat™ G2 Natural MB	Caprylhydroxamic Acid [and] Glyceryl Caprylate [and] Glycerin	Univar Solutions/ Inolex	1.00
B	Jaguar® Optima	Guar Hydroxypropyltrimonium Chloride	Univar Solutions/ Solvay	0.30
	Citric Acid USP/FCC	Citric Acid [33% aqueous solution]	Univar Solutions	0.10
	AminoSensyl™ HC	Brassica Alcohol [and] Brassicyl Valinate Esylate	Univar Solutions/ Inolex	8.00
	Adol® 63	Cetearyl Alcohol	Univar Solutions	4.00
C	Elevance Smooth CS-110N	Hydrogenated Soybean Polyglycerides [and] C15-23 Alkane	Univar Solutions/ Elevance	2.50
	Argan Oil	Argan (Argania spinosa) Oil	Univar Solutions	1.00
		Cocos Nucifera (Coconut) Oil		0.50
	Avocado Oil	Persea Gratissima (Avocado) Oil	Univar Solutions	1.00
	Mango Butter	Mangifera Indica (Mango) Seed Butter	Univar Solutions	0.20
D	GRAS Luchee & Fruit ORC 1500038	Fragrance	Orchidia®	0.50
	D-Panthenol 75L	Panthenol	Univar Solutions/ DSM	0.70
	β-Carotene 30% FS	Beta Carotene	Univar Solutions/ DSM	0.024
				100.00

PROCEDURE

1. Add MaizeCare™ Style Polymer to water with mixing and heat to 50°C, continuing to mix until fully dispersed.

2. Sequentially add the remaining phase A ingredients with mixing after each.

3. Sequentially add phase B ingredients to phase A with mixing after each.

4. Add Phase C ingredients sequentially to AB and heat to 75°C with mixing. Homogenize.
5. Begin cooling and continue to slowly mix.

6. At 50°C, sequentially add phase D ingredients with mixing after each. [Note: Discontinue mixing before formula reaches 45°C].

PROPERTIES

pH 6.0-6.5
% Naturally-derived= 99.3%
Viscosity= 90,000 cps at 0.5 rpm
32,000 cps at 20 rpm
Color: Pale Orange



MaizeCare™ Style Polymer Results



CONTROL Curl Cream with 2% MaizeCare™ Style Polymer was preferred because of the light and foamy texture. Treatment with the STYLED products provided more elongated curls and less curl shrinkage as the hair dried. After 5 days, treatment with the STYLED products was the preferred option.

Commercial Benchmarks*	CONTROL Curl Cream, HOLD Styling Gel & DEFINE Molding Clay	Commercial Benchmarks*	CONTROL Curl Cream, HOLD Styling Gel & DEFINE Molding Clay
	More elongated curls Less curl shrinkage	Crunchier More frizz	Better curl retention and hold No need to reapply oil mid-week
			
Initial		After 5 days	

*Benchmarks market standard curl cream, styling gel & molding clay

MaizeCare™ Style Polymer Results



Control Curl Cream

CONTROL Curl Cream and HOLD Styling Gel with 2% MaizeCare™ Style Polymer are tested against the control formulations without MaizeCare™ Style Polymer.

After 5 days, more frizz and less curl definition were observed when using control products without MaizeCare™ Style Polymer.

Control Products without
MaizeCare™ Style Polymer

CONTROL Curl Cream &
HOLD Styling Gel

More frizz

Better curl
definition



Boost

Sugar Spray

Sometimes our waves and curls need a bit of help to really display their full glory. Our BOOST Sugar Spray is a light water-based texture spray that does something fantastic to waves and curls, giving them definition without frizz. We’re not saying there’s magic in there, but you may wonder as you spray and watch your waves or curls come to life.

In this formulation, we paired the versatile MaizeCare™ Style Polymer with:

UCARE™ Polymer JR-125

This product delivers light to strong conditioning and controlled deposit of actives in a variety of hair care applications. It enables clear formulations with no build-up on hair while also being volume friendly. Additionally, the UCARE™ Polymer JR-125 supports a “natural,” non-toxic label claim.

PHASE	TRADE NAME	INCI	SUPPLIER	%
A	Deionized Water	Water		48.00
	MaizeCare™ Style Polymer	Hydrolyzed Corn Starch	Univar Solutions/ Dow	2.50
	Spectrastat™ PHL	Caprythydroxamic Acid (and) 1,2- Hexanediol (and) Propanediol	Univar Solutions/ Inolex	1.50
B	Deionized Water	Water		46.40
	UCARE™ Polymer JR-125	Polyquaternium-10	Univar Solutions/ Dow	0.20
C	Glycerin, USP	Glycerin	Univar Solutions	1.00
	Pentavitin®	Saccharide Isomerate (and) Citric Acid (and) Sodium Citrate	DSM	0.40
				100.00

PROCEDURE

1. Add MaizeCare™ Style Polymer to water with mixing and heat to 50°C, continuing to mix until fully dispersed before adding next ingredient.

2. Combine Phase B and mix until clear.
3. Add phase B to phase A with mixing.

4. Add Phase C ingredients sequentially to AB with mixing after each.

PROPERTIES

pH - 5.0
% Naturally-derived = 100%



MaizeCare™ Style Polymer Results



BOOST Sugar Spray containing 2.5% MaizeCare™ Style Polymer provided better definition and improved frizz control, compared to a commercial benchmark.

Before Treatment	Commercial Benchmark	BOOST Sugar Spray
	 More frizz Loss hold	 Less frizz Better definition



Tame

De-Frizz Wand

We see you flyaways, and we're coming straight for you with our TAME De-frizz wand. Whether you're going for a slicked back look, or just loose defined bouncy curls and waves, we've got you covered. This small but mighty wand is the perfect instant style tool for frizz reduction, curl definition and to tuck in stubborn strays quickly and smoothly. For use on hair only, not intended for lashes!

In this formulation, we paired the versatile MaizeCare™ Style Polymer with:

DOWSIL™ CE-7081 Smart Style

A nonionic emulsion with a unique crosslinked structure and amino functionality that provides conditioning and styling properties such as curl retention, curl memory, definition, dry combing, and smoothness.

PHASE	TRADE NAME	INGREDIENTS	SUPPLIER	% BY WT
A	Deionized Water	Water		45.00
	MaizeCare™ Style Polymer	Hydrolyzed Corn Starch	Univar Solutions/ Dow	2.00
	Spectrastat™ G2 Natural MB	Caprylhydroxamic Acid (and) Glyceryl Caprylate (and) Glycerin	Univar Solutions/ Inolex	1.00
B	Deionized Water	Water		39.30
C	Glycerin, USP	Glycerin	Univar Solutions	2.00
	DOWSIL™ CE-7081 Smart Style	Silicone Quaternium-16/Glycidoxy Dimethicone Crosspolymer (and) Undeceth-11 (and) Undeceth-5	Univar Solutions/ Dow	4.00
D	Tropical Island ORC1500051	Fragrance	Orchidia®	0.30
	Poly Suga®Mulse D-9	Sorbitan Oleate Decylglucoside Crosspolymer	Colonial	0.60
E	Citric Acid, Anhydrous FCC USP	Citric Acid (33% solution)	Univar Solutions	qs
	Deionized Water	Water		qs
				100.00

PROCEDURE

1. Add MaizeCare™ Style Polymer to water with mixing and heat to 50°C, continuing to mix until fully dispersed before adding next ingredients in phase A.
2. Combine phase B ingredients with mixing and homogenize for 7 minutes at 10,000 rpm.
3. Add phase A to phase B with mixing.
4. Add Phase C ingredients to phase AB sequentially with mixing.
5. Pre-mix phase D ingredients and add to phase ABC.
6. Qs with citric acid as needed to reach pH of 6.0-6.5 and qs with remainder of water.

PROPERTIES

pH 6.0-6.5
% Naturally-derived = 95.7%
Viscosity 62,000 cP (T-D, 25°C, 5 rpm)
40,000 cP (T-D, 25°C, 10 rpm)
25,000 cP (T-D, 25°C, 20 rpm)



MaizeCare™ Style Polymer Results



TAME De-Frizz Wand containing 2% MaizeCare™ Style Polymer provided instant styling without heat, curl definition and minimized frizz.

Before Treatment



After Treatment





DERIVED
FROM NATURE,
BACKED
BY SCIENCE.





For more information call us at
+1 800.531.7106 or visit Discover.UnivarSolutions.com/Styled-NA

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