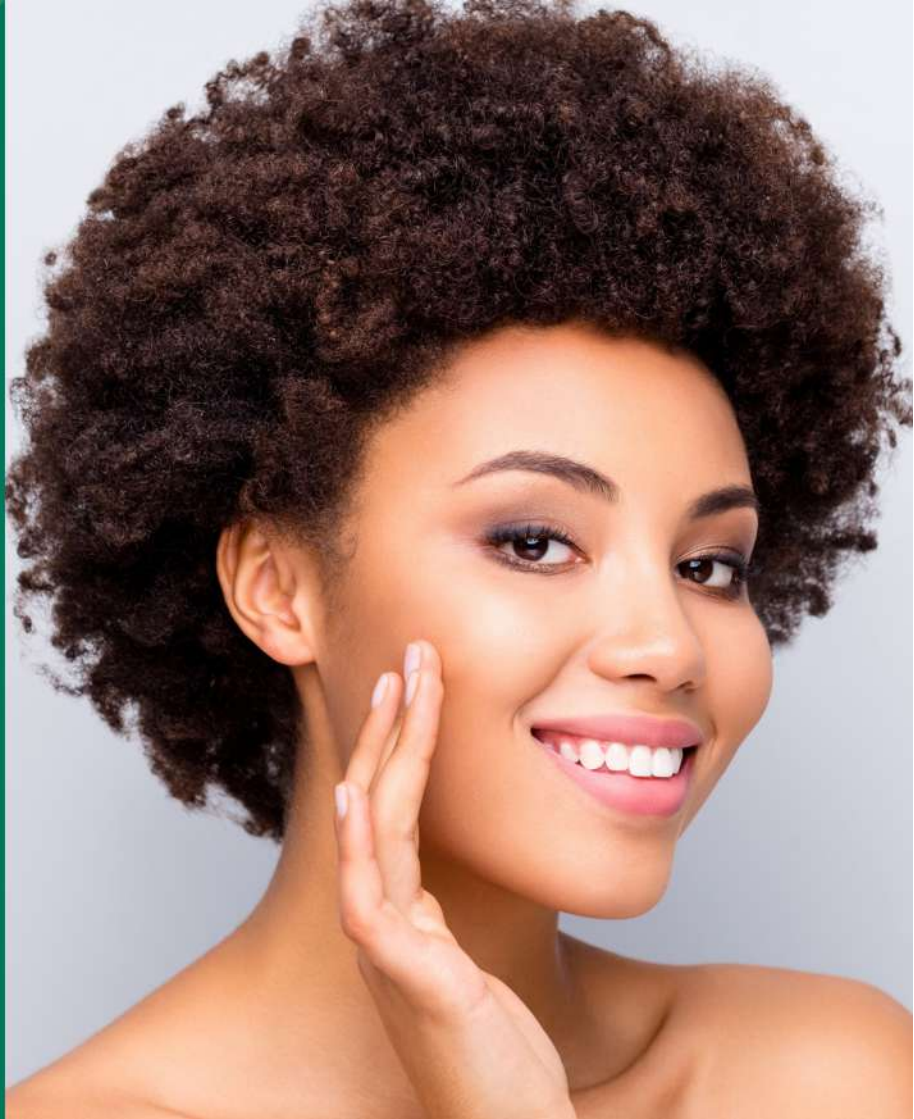


POLYMEREXPERT PRESENTS

ESTOGEL[®] MAX

The perfect oil rheology modifier

Formulation Guide 2024





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About

- INCI = Castor Oil/IPDI Copolymer, Caprylic/Capric Triglyceride, Hydrogenated Castor Oil/Sebacic Acid Copolymer
- Natural Origin Index = 0.94 (ISO16128)
- Processing temperature = 85°C
- China INCI compliant
- RSPO Certified

Presentation

EstoGel® Max is a concentrate of innovation. It is the perfect combination of two natural and high-performance oil gelling polymers. EstoGel® Max allows the formulation of oily gels over a wide range of viscosity from liquid to solid with excellent suspensive capacities. The network formed has the structure and rigidity of EstoGel® M and the flexibility and flowability of EstoGel® Green. This combination provides your oil phases with optimal compatibility and stability. Its easy processing at 85°C and the transparency of the derived products make this ingredient the ideal substitute for waxes and butters.



Technical advantage

Based on non-covalent interactions leading to a supramolecular assembly, the technology is the result of two patent families. Indeed, the gel formed is the result of perfectly organized entities held together by intermolecular forces. This organization allows to cover a wide range of viscosity from viscous liquid to solid with excellent mechanical properties and suspensive capacities. Unlike waxes and butters whose crystallinity makes the formulations opaque, the hydrogen bonding assemblies lead to perfectly transparent structures for a very wide range of oils of different polarity.

A concentrate of innovation

EstoGel® Max combines the advantages of EstoGel® M and EstoGel® Green. The presence of two different types of hydrogen bonds is the reason for the unique properties of this rheology modifier. In addition to the easy processing at 85°C, the mechanical properties combine rigidity and flexibility making this ingredient ideal for the elaboration of transparent solid sticks and more particularly lip products. The fragility of the hydrogen bonds during application allows a slippery application accompanied by a fine, delicate and silky sensory.



Revival Cream

A rich cream with a velvety feel that leaves a delicate sensory veil for regenerated skin.

PHASE	TRADE NAME	INCI NAME	SUPPLIER	%
A	Demineralized Water	Water	-	66.50
A	Preservatives	Preservatives	-	0.80
B	Glycerin	Glycerin	-	3.00
B	Rhodicare® S	Xanthan Gum	Summit Cosmetics Europe	0.20
C	EstoGel® Max	Castor Oil/IPDI Copolymer (and) Caprylic/Capric Triglyceride (and) Hydrogenated Castor Oil/Sebacic Acid Copolymer	PolymerExpert	4.00
C	DUB MCT 5545	Caprylic/Capric Triglyceride	Stéarinerie Dubois	15.00
C	Castor Oil	Ricinus Communis (Castor) Seed Oil	-	2.00
C	Macadamia Oil	Macadamia Integrifolia Seed Oil	-	2.00
C	Montanov™ 68 MB	Cetearyl Alcohol (and) Cetearyl Glucoside	Seppic	4.00
D	Gatuline® In-Tense MB	Caprylic/Capric Triglyceride (and) Spilanthes Acmella Flower Extract	Gattefossé	2.00
E	Parfum Beausoleil	Fragrance	H. Reynaud & Fils	0.50

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Revival Cream



Process

- Add A in the main beaker
- Premix B and add it under stirring into A
- Heat up A+B to 80°C
- In a secondary beaker heat up C to 85°C and homogenize for 30 minutes
- Make the emulsion pouring C into A+B for 15 minutes
- Cool down to 30-35°C, add D then E

Benefits

- Rich texture with no greasy feel
- Emulsion stabilizer
- Velvety skin feel

Magic White

Oily micro-droplets that encapsulate a lightening active ingredient to fight against age spots.

PHASE	TRADE NAME	INCI NAME	SUPPLIER	%
A	EstoGel® Max	Castor Oil/IPDI Copolymer (and) Caprylic/Capric Triglyceride (and) Hydrogenated Castor Oil/Sebacic Acid Copolymer	PolymerExpert	1.50
A	DUB MCT 5545	Caprylic/Capric Triglyceride	Stéarinerie Dubois	8.25
A	Pearls	Pearls	-	0.25
B	Demineralized Water	Water	-	77.30
B	Propanediol	Propanediol	-	5.00
B	Preservatives	Preservatives	-	0.60
B	Carbopol® Ultrez 10	Carbomer	Lubrizol	0.18
C	Parfum Beausoleil	Fragrance	H. Reynaud & Fils	0.50
C	Sytenol® A	Bakuchiol	DKSH	1.00
D	Glycerin	Glycerin	-	5.00
D	Rhodicare® T	Xanthan Gum	Summit Cosmetics Europe	0.20
E	NaOH (sol.10%)	Water (and) Sodium Hydroxide	-	0.22

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Magic White



Process

- Heat up A to 85°C and homogenize for 30min
- Heat up B to 80°C under stirring
- Add C to A and mix until the blend is uniform
- Add A+C to B stirring with a very low shear (around 200rpm) for 10 minutes
- Cool down to 40°C
- Premix D and introduce it
- Cool down to 35°C and neutralized

Benefits

- Creation of oily micro-droplets
- Encapsulation technology to maximize the potency of active ingredients

Perles de Lavande

Night serum infused with lavender pearls to nourish the skin and deliver a relaxing fragrance.

PHASE	TRADE NAME	INCI NAME	SUPPLIER	%
A	EstoGel® Max	Castor Oil/IPDI Copolymer (and) Caprylic/Capric Triglyceride (and) Hydrogenated Castor Oil/Sebacic Acid Copolymer	PolymerExpert	2.00
A	AlgaPur™	Triolein	Unipex	4.00
A	Castor Oil	Ricinus Communis (Castor) Seed Oil	-	4.00
A	Violet 2 (sol. 1%)	Violet 2 (sol. 1%)	-	0.07
A	Red (sol. 0.5%)	Red (sol. 0.5%)	-	0.01
B	Demineralized Water	Water	-	72.75
B	Phenoxyethanol	Phenoxyethanol	-	0.60
B	Covarine White WN 9787	CI 77891 (and) Aqua (and) Glycerin (and) Xanthan Gum (and) Sodium Citrate	Sensient	0.20
B	Carbopol® Ultrez 10	Carbomer	Lubrizol	0.30
C	Fève du Lubéron	Fragrance	Expressions Parfumées	0.50
D	Glycerin	Glycerin	-	15.00
D	Rhodicare® S	Xanthan Gum	Summit Cosmetics Europe	0.20
E	NaOH (sol. 10%)	Water (and) Sodium Hydroxide	-	0.37

Perles de Lavande



Process

- Heat up A to 85°C under stirring with high shear
- At 85°C, disperse the polymer for 30 minutes with high shear
- Add B in the main beaker and heat up at 80°C under stirring
- Add C to A and mix until the blend is uniform
- Add A+C to B stirring with a very low shear (around 200rpm) for 10 minutes
- Cool down slowly to 35°C
- Add a premix of Glycerin and Xanthan Gum
- Neutralize the Carbomer with E

Benefits

- Creation of oily micro-droplets
- Encapsulation technology to maximize the potency of active ingredients

AquaStick

An incredibly fresh stick with a high water content

PHASE	TRADE NAME	INCI NAME	SUPPLIER	%
A	Demineralized Water	Water	-	45.30
A	Phenoxyethanol	Phenoxyethanol	-	0.60
A	Glycerin	Glycerin	-	3.00
A	Physiogenyl®	Sodium PCA (and) Magnesium PCA (and) Zinc PCA (and) Manganese PCA	Solabia	1.00
A	Blue 1 (sol. 0.5%)	Water (and) Blue 1	-	0.10
B	EstoGel® Max	Castor Oil/IPDI Copolymer (and) Caprylic/Capric Triglyceride (and) Hydrogenated Castor Oil/Sebacic Acid Copolymer	PolymerExpert	5.00
B	Eutanol® G	Octyldodecanol	BASF	6.00
B	Cetiol® C5 C	Coco-Caprylate Caprate	BASF	14.30
B	Rice Bran Wax	Oryza Sativa (Rice) Bran Wax	-	5.00
B	Candelilla Wax	Euphorbia Cerifera (Candelilla) Wax	-	5.00
B	Beeswax	Beeswax	-	3.00
B	Lanette® 16	Cetyl Alcohol	BASF	3.00
B	Hydriol® PGMO.4	Polyglyceryl-4 Oleate	DKSH	1.00
C	Parfum Aqua Zen	Fragrance	Aroma Zone	0.50
D	Corn Starch	Zea Mays (Corn) Starch	-	5.00
E	Tocopherol	Tocopherol	-	0.20

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AquaStick



Process

- Heat up B to 85°C and homogenize for 30 minutes
- Cool down to 80°C
- Add the fragrance
- Heat up A to 80°C
- Add A to B under high shear for 15 minutes
- Add D and homogenize
- Add E and homogenize
- Pour into a suitable packaging

Benefits

- Incorporate large volumes of water into your sticks
- An ultra-fresh solid stick that applies like a cream

Cleansing Balm-in-oil

Smooth, ultra-creamy anhydrous balm that melts into oil on application to gently remove make-up.

PHASE	TRADE NAME	INCI NAME	SUPPLIER	%
A	EstoGel® Max	Castor Oil/IPDI Copolymer (and) Caprylic/Capric Triglyceride (and) Hydrogenated Castor Oil/Sebacic Acid Copolymer	PolymerExpert	6.00
A	DUB MCT 5545	Caprylic/Capric Triglyceride	Stéarinerie Dubois	33.85
A	Castor Oil	Ricinus Communis (Castor) Seed Oil	-	31.50
A	Dermalcare® LIA MB	Isoamyl Laurate	Summit Cosmetics Europe	10.00
B	Beeswax	Beeswax	-	9.00
C	Cetiol® SB 45	Butyrospermum Parkii (Shea) Butter	BASF	5.00
D	Hydriol® PGMO.4	Polyglyceryl-4 Oleate	DKSH	4.00
E	Paprika Bio Extractive®	Helianthus Annuus Seed Extract (and) Capsicum Annum Fruit Extract (and) Rosmarinus Officinalis Leaf Extract	Botanica	0.15
E	Parfum Monoï Ensoleillé	Fragrance	Mane	0.50

Cleansing Balm-in-oil



Process

- Heat up A to 85°C under stirring
- At 85°C, disperse the polymer for 30 minutes with high shear
- Introduce B and stir until the blend is homogeneous
- Cool down to 65°C
- Add C and stir until the blend is homogeneous
- Add D and stir until the blend is homogeneous
- Add E and stir until the blend is homogeneous
- Pour into a jar at 65°C

Benefits

- Transformative texture that melts into an oil during application on the skin
- Very nice pick-up

Rouge Vinyle

An ultra-shiny lipstick without wax with an terribly melting application.

PHASE	TRADE NAME	INCI NAME	SUPPLIER	%
A	EstoGel® Max	Castor Oil/IPDI Copolymer (and) Caprylic/Capric Triglyceride (and) Hydrogenated Castor Oil/Sebacic Acid Copolymer	PolymerExpert	55.00
A	COD-8002	Ricinus Communis (Castor) Seed Oil (and) Red6	Maprecos	3.20
A	COD-8001	Ricinus Communis (Castor) Seed Oil (and) Red7	Maprecos	12.80
A	DUB MCT 5545	Caprylic/Capric Triglyceride	Stéarinerie Dubois	23.40
A	Hazelnut Oil	Corylus Avellana (Hazelnut) Seed Oil	-	5.00
B	Parfum Vanille Gourmande	Fragrance	Mane	0.60

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Rouge Vinyle



Process

- Mix EstoGel® Max with the oils for 30 minutes at 85°C with a rotor stator
- Add the fragrance and homogenize
- Pour into a suitable mold

Benefits

- Solid lipstick without wax
- Melting and glide-on application
- Ultra shiny result on the lips

Whipped Foundation

A creamy anhydrous foundation with a very soft application.

PHASE	TRADE NAME	INCI NAME	SUPPLIER	%
A	DUB MCT 5545	Caprylic/Capric Triglyceride	Stéarinerie Dubois	34.00
A	Castor Oil	Ricinus Communis (Castor) Seed Oil	-	34.00
A	Cetiol® C5 C	Coco-Caprylate Caprate	BASF	5.00
A	Unipure White LC 987	CI 77891	Sensient	8.87
A	Unipure Yellow LC 182	CI 77492	Sensient	0.75
A	Unipure Red LC 381	CI 77491	Sensient	0.29
A	Unipure Black LC 989	CI 77499	Sensient	0.09
B	EstoGel® Max	Castor Oil/IPDI Copolymer (and) Caprylic/Capric Triglyceride (and) Hydrogenated Castor Oil/Sebacic Acid Copolymer	PolymerExpert	6.00
B	Rice Bran Wax	Oryza Sativa (Rice) Bran Wax	-	7.00
B	Salacos® HS-6C	Polyhydroxystearic Acid	Summit Cosmetics Europe	1.00
C	Satinier M5	Silica	Summit Cosmetics Europe	2.50
D	Parfum Vanille Gourmande	Fragrance	Mane	0.50

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Whipped Foundation



Process

- Blend together oils and pigments
- Add B, heat up to 85°C and homogenize for 30 minutes
- Cool to 80°C, add C and homogenize for 5 minutes
- Add D and stir for 5 minutes

Benefits

- Nice binder for a delicious texture
- Soft and silky on application

Clear Sunstick

Very high protection, perfectly transparent sun stick with an invisible finish on the skin.

PHASE	TRADE NAME	INCI NAME	SUPPLIER	%
A	EstoGel® Max	Castor Oil/IPDI Copolymer (and) Caprylic/Capric Triglyceride (and) Hydrogenated Castor Oil/Sebacic Acid Copolymer	PolymerExpert	50.00
A	Cetiol® B	Dibutyl Adipate	BASF	6.40
A	DUB DIPA	Diisopropyl Adipate	Stéarinerie Dubois	11.00
A	Cetiol® CC	Dicaprylyl Carbonate	BASF	1.90
A	Parsol® 840	Octocrylene	DSM	9.00
A	Parsol® EHS	Ethylhexyl Salicylate	DSM	4.50
A	Uvinul® T 150	Ethylhexyl Triazone	BASF	4.50
A	Uvinul® A Plus Granular	Diethylamino Hydroxybenzoyl Hexyl Benzoate	BASF	9.00
A	Tinosorb® S	Bis-Etylhexyloxyphenol Methoxyphenyl Triazine	BASF	2.70
B	Parfum Monoï	Fragrance	H. Reynaud & Fils	1.00

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Clear Sunstick



Process

- Heat up A to 85°C and homogenize for 30 minutes
- Cool down to 80°C
- Add B and mix for 5 minutes
- Pour into a suitable packaging

Benefits

- Transparent stick easy to formulate (85°C)
- Sensorial and delicate touch on skin

Hair Serum « Perfect Drop »

Slightly gelled hair serum which delivers "a perfect drop" that stays in shape on the skin.

PHASE		RAW MATERIAL		%
A	EstoGel® Max	Castor Oil/IPDI Copolymer (and) Caprylic/Capric Triglyceride (and) Hydrogenated Castor Oil/Sebacic Acid Copolymer	PolymerExpert	1.30
A	Cetiol® C5 C	Coco-Caprylate/Caprates	BASF	25.00
A	DUB MCT 5545	Caprylic/Capric Triglyceride	Stéarinerie Dubois	12.93
A	DUB IPP	Isopropyl Palmitate	Stéarinerie Dubois	25.00
A	Grapeseed Oil	Vitis Vinifera Seed Oil	-	28.00
A	Castor Oil	Ricinus Communis (Castor) Seed Oil	-	5.00
B	Touloucouna Oil	Carapa Procera Seed Oil	-	2.00
C	Parfum Monoï	Fragrance	H. Reynaud & Fils	0.60

Hair Serum « Perfect Drop »



Process

- Heat up A to 85°C under stirring with high shear
- At 85°C, disperse the polymer for 30 minutes with high shear
- Cool down slowly to 30°C
- Add B then C and mix slowly until the blend is uniform

Benefits

- Ideal for creating oily gels in dropper applications
- Perfect shape of the drop

Clear Stick Monoï

A delicate touch of perfume for secretly applying your own scent

PHASE	RAW MATERIAL			%
A	EstoGel® Max	Castor Oil/IPDI Copolymer (and) Caprylic/Capric Triglyceride (and) Hydrogenated Castor Oil/Sebacic Acid Copolymer	PolymerExpert	50.00
A	DUB MCT 5545	Caprylic/Capric Triglyceride	Stéarinerie Dubois	44.80
B	Parfum Monoï Ensoleillé	Fragrance	Mane	5.00
B	Tocopherol	Tocopherol	-	0.20

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Clear Stick Monoi



Process

- Heat up A to 85°C under stirring with high shear
- At 85°C, disperse the polymer for 30 minutes with high shear
- Cool down to 80°C
- Add B and mix well
- Pour into a suitable packaging

Benefits

- Crystal clear stick
- Delicate application on the skin

Bubble Fragrance

Micro-encapsulated fragrance that reveals itself immediately on application to the skin.

PHASE		RAW MATERIAL		%
A	EstoGel® Max	Castor Oil/IPDI Copolymer (and) Caprylic/Capric Triglyceride (and) Hydrogenated Castor Oil/Sebacic Acid Copolymer	PolymerExpert	2.00
A	DUB MCT 5545	Caprylic/Capric Triglyceride	Stéarinerie Dubois	5.00
B	Parfum Tranquilité Coco	Fragrance	Mane	3.00
C	Demineralized Water	Water	-	78.80
C	Phenoxyethanol	Phenoxyethanol	-	0.60
C	Carbopol® Ultrez 10	Carbomer	Lubrizol	0.18
D	Glycerin	Glycerin	-	10.00
D	Rhodicare® T	Xanthan Gum	Summit Cosmetics Europe	0.20
E	NaOH (sol. 10%)	Water (and) Sodium Hydroxide	-	0.22

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Bubble Fragrance



Process

- Heat up A to 85°C under stirring with high shear
- At 85°C, disperse the polymer for 30 minutes with high shear
- Cool down to 80°C
- Add B to A and mix well
- Add C into the main beaker and swell the carbomer
- Add A+B to C stirring with a low shear (around 500rpm) for 10 minutes
- Prepare D, premixing xanthan gum into glycerin
- Add D and mix until the blend is uniform
- Neutralize the carbomer with E

Benefits

- Creation of oily micro-droplets for an innovative texture
- Fragrance encapsulation for long lasting effect

Oriental Flowers

Dry oil with petals and pearls levitating

PHASE		RAW MATERIAL		%
A	EstoGel® Max	Castor Oil/IPDI Copolymer (and) Caprylic/Capric Triglyceride (and) Hydrogenated Castor Oil/Sebacic Acid Copolymer	PolymerExpert	1.25
A	DUB MCT 5545	Caprylic/Capric Triglyceride	Stéarinerie Dubois	11.15
A	Cetiol® C5 C	Coco-Caprylate Caprate	BASF	25.00
A	DUB IPP	Isopropyl Palmitate	Stéarinerie Dubois	25.00
A	Grapeseed Oil	Vitis Vinifera (Grape) Seed Oil	-	32.00
B	Castor Oil	Ricinus Communis (Castor) Seed Oil	-	5.00
C	Petals	Petals	GreenPhyt	0.17
C	SunSHINE® Ultra Glitter Golden	Synthetic Fluorophlogopite (and) Titanium Dioxide (and) Iron Oxides	Maprecos	0.03
D	Parfum Beausoleil	Fragrance	H. Reynaud & Fils	0.40

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Oriental Flowers



Process

- Heat up A to 85°C and homogenize for 30 minutes
- Cool down to 80°C
- Add B and stir for 5 minutes
- Cool down to 30-35°C under stirring
- Add C then D and blend it

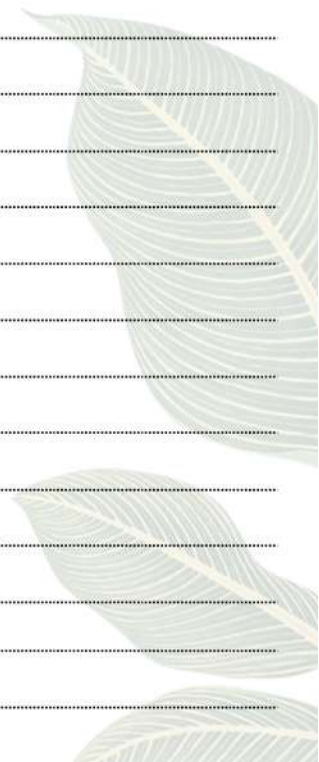
Benefits

- Excellent suspending properties for a catchy visual effect
- A slightly gelled oil with a luxurious enveloping touch

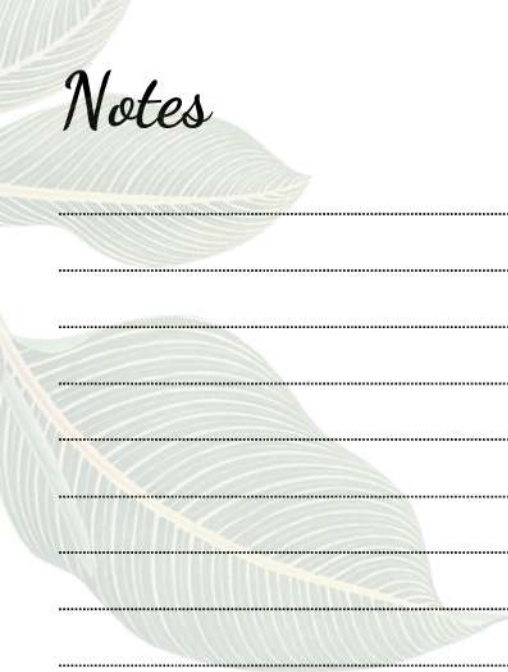
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Notes



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