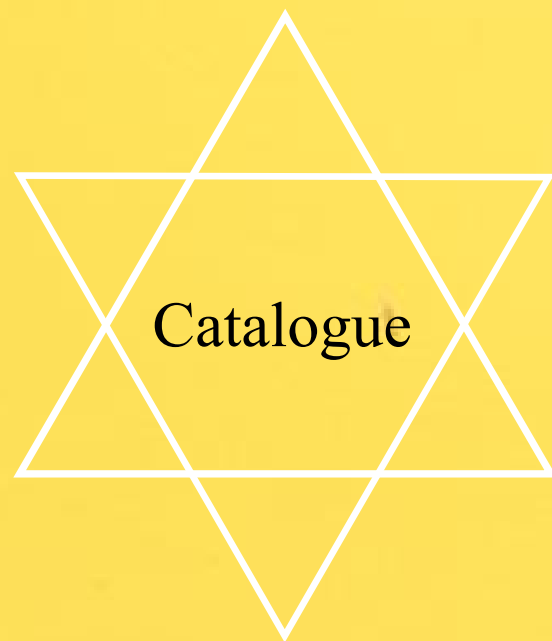


RenatuCare SG

Sodium Stearoyl Glutamate

— Reachin chemical





01 Feature introduction

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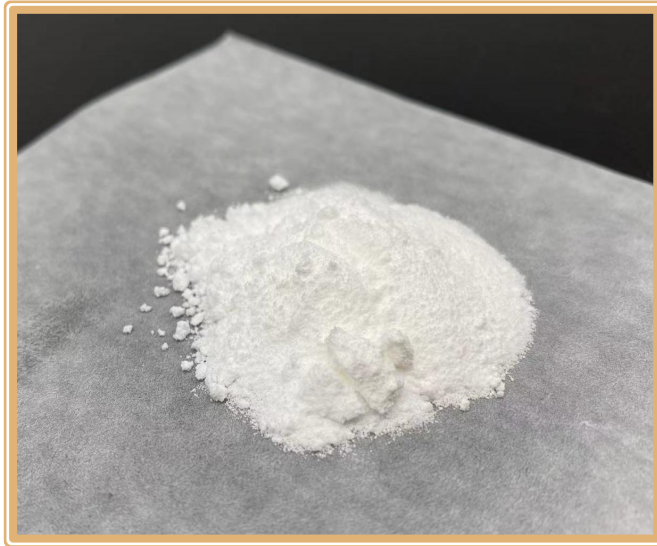
05 Contact information



01.Feature introduction

RenatuCare SG (INCI:Sodium Stearoyl Glutamate)

- Wide range of applications:RenatuCare SG can be used as anionic mild surfactant,oil in water amino acid emulsifier ,detergent and foaming agent and skin care products.
- Easy-to-use: It can be added in oil phase or water phase, and also can be used in cold or hot process.
- Safety: RenatuCare SG is mild and can be used in cleansing products for sensitive skin without causing irritation. It does not cause acne and is also friendly to pregnant women.



01.Feature introduction

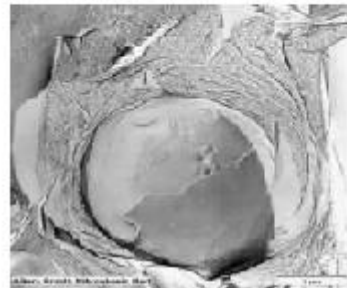
- RenatuCare SG has excellent electrolyte compatibility, especially with water-soluble UV sunscreen, inorganic and organic sunblock.
- RenatuCare SG is easy to improve skin sensation by adjusting the amount of grease, wax and polymer.
- RenatuCare SG can form a layered liquid crystal, with excellent emulsifying effect and moisturizing effect

Fig.2 Droplet size



Microscopic view, enlargement 400-fold Average droplet size: 6-7 μm

Fig.3 Lamellar gel



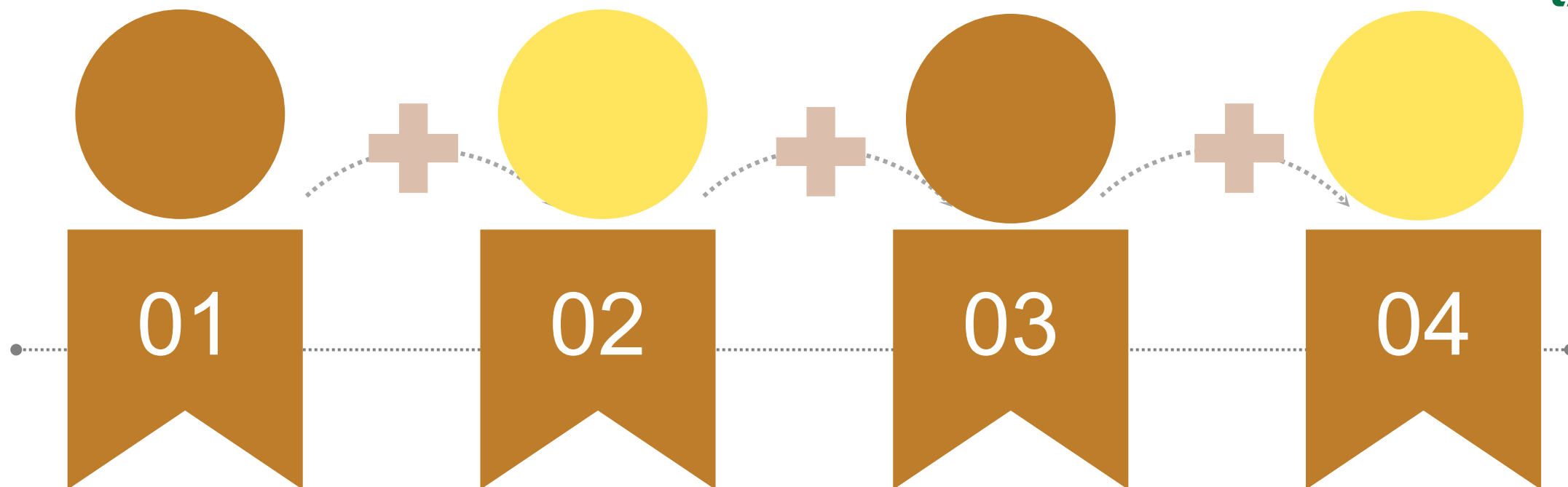
Freeze-fracture TEM image on DE/04/139/3



Monodisperse droplet size distribution and lamellar gel structure with RenatuCare SG

- A UV protection moisturizing day cream with an average particle size of 6-7 μm as shown in Figure 2.
- The frozen section of the transmission electron microscope photograph of this sample is shown in Figure 3.
- The oil droplets are surrounded by layered liquid crystals, which makes it easy to be compatible with the layered structure in the skin stratum corneum, so it has good moisturizing ability.

01.Feature introduction



It is mild and non irritating to eyes and skin. After cleaning, the skin is clean, not tight and smooth

O/w type amino acid emulsifier can form layered liquid crystal structure; Low addition provide and good emulsifying ability

**It has strong salt resistance, high safety
It is compatible with functional products containing multiple active ingredients**

It is easier to thicken when used alone or together with other amino acid surfactants such as sodium lauroyl glutamine and sodium lauroyl methyl taurine; It is the best choice of amino acid surfactant cleansing cream

Where can RenatuCare SG be used?

Product application:

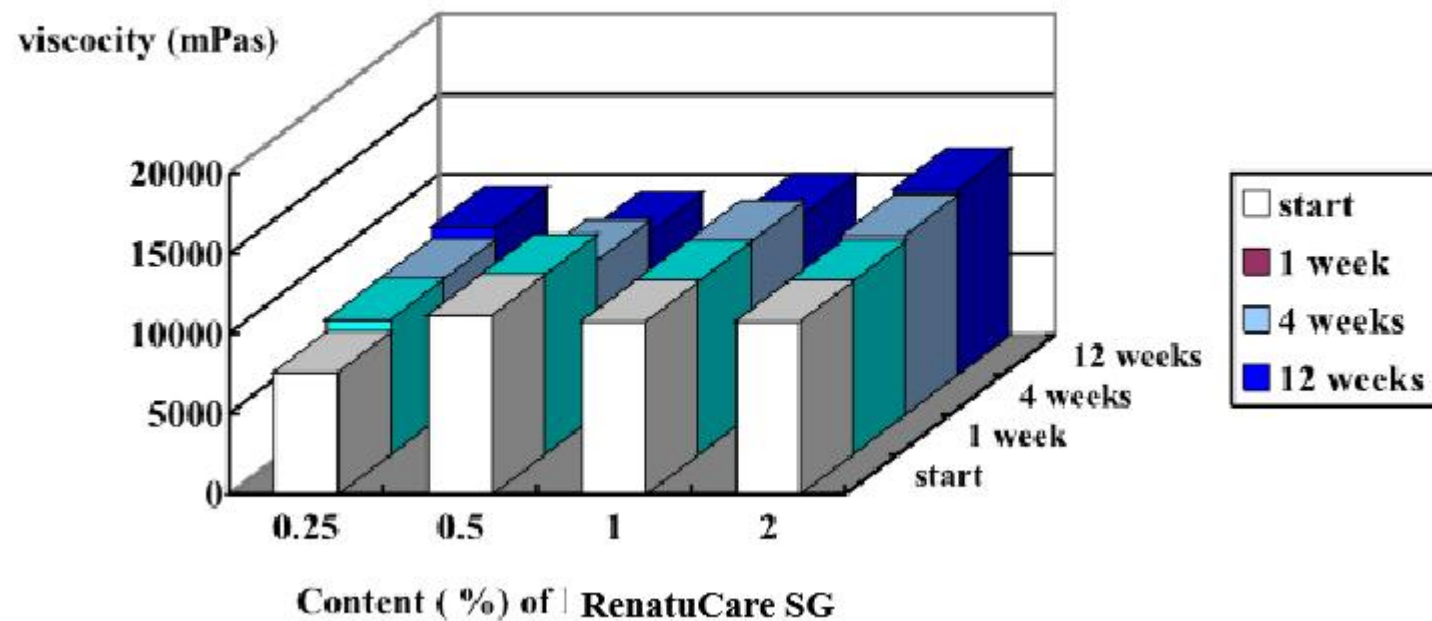
-  Skin care cream, lotion
-  Child care products
-  Sunscreen Products
-  Cleansing Cream

Consumption:

General recommended dosage: 0.5-2.0%(emulsifying agent)
5.0-20.0%(facial Cleanser)

Remild SG	
Test items	index
Appearance(25°C)	White powder or granular solid
Acid value(mg KOH/g)	95.0-130.0
Water content(%)max	5.0
Active substance content(%)min	95.0

Fig 1 Viscosity stability



Emulsifying capacity test

- It can be seen from the figure that only 0.25% RenatuCare SG is needed to get a very stable formula.
- The stability of viscosity is not proportional to the content of RenatuCare SG, and the viscosity is very stable within 2 weeks.

03.Experimental data

Anionic emulsifier	RenatuCare SG	Potassium Cetyl Phosphate	Sodium Stearate
Electrolyte			
NaCl	++	--	-
Disodium Phenyl Dibenzimidazole Tetrasulfonate	++	++	-
Phenylbenzimidazole Sulfonic Acid	++	++	-
Hydrolyzed Milk Protein	++	-	-

The electrolyte compatibility of 1% **RenatuCare SG** with potassium hexadecyl phosphate and sodium carbide was compared:

- The experimental stability test cycle is 12 weeks, and the test temperatures are -5 °C, 40 °C and 50 °C.
- The electrolytes used are sodium chloride, water-soluble UVA sunscreen, water-soluble UVB sunscreen, and active substances containing free amino acids and minerals.

Conclusion:

- As shown in the table, the emulsions using RenatuCare SG as emulsifier are very stable within 12 weeks.
- The electrolyte compatibility of RenatuCare SG is very good, followed by potassium hexadecyl phosphate, and sodium carbide is the worst

04.Related products



LANCÔME UV EXPERT AQUA GEL

Vater, ethylhexyl methoxycinnamate, denatured ethanol, isononyl isononanoate, BIS thylhexoxyphenol methoxyphenyl triazine, cresotrazole trisiloxane, iethylaminohydroxybenzoyl benzoate hexyl, methylene bis benzotriazolyl etramethylbutylphenol, silica, dipropylene glycol, coconut alcohol octanoate / sebacate, etearyl alcohol, tocopherol (vitamin E), diisopropyl sebacate, ethylhexyltriazinone, tert utanol, **Sodium stearoyl glutamate**, sodium benzoate, phenoxyethanol, polyethylene lycol-20, polyglycerol-10 laurate, maltodextrin, sunflower (Helianthus annuus) seed il, acryloyl dimethyl ammonium taurine /vp copolymer, xanthan gum, 1,2-pentanediol, Mentha piperita leaf extract, isocetyl stearate, propylene glycol, Leontopodium alpinum flower / leaf extract, Carbomer Moringa Pterygosperma seed extract, sorbitol, Rosa gallica flower extract, cetearyl glucoside, butanediol, potassium hydroxide, butylated hydroxytoluene, citric acid, potassium sorbate, inulin lauryl carbamate, glycerol, essence



04.Related products



BIOTHERM BARRIER REPAIR CREAM

Water, glycerin, dioctyl ether, 1,2-pentanediol, polyglycerol-6 distearate, 1,3-propanediol, synthetic cetacean, jojoba esters, cetearyl isononanoate, behenol, acrylamide / acryloyl dimethyl taurine sodium copolymer, hydroxypropyl starch phosphate, sunflower (Helianthus anus) seed wax, isohexadecane, tocopherol (vitamin E), p-hydroxyacetophenone, essence, cetyl alcohol, polyglycerol-3 beeswax, **Sodium stearoyl glutamate**, polysorbate-80, octyl salicylic acid, sodium hyaluronate, disodium ethylenediamine disuccinate, polyglycerol-3, Acacia decurrens flower wax, sorbitan oleate, wheat (Triticum vulgare) seed extract, adenosine, ceramide NP, Centella asiatica extract, hyaluronium fermentation products



Recommended formula

	INCI Name	Dosage (%)
A	Decyl Glucoside	1.0
	Cetearyl Alcohol	1.3
	Dicaprylyl Carbonate	4.0
	Triethylhexanoin	2.0
	Mineral Oil	5.0
	Dimethicone	1.0
	* Sodium Polyacrylate & C13-14 Isoparaffin & Laureth-7(Repoly 415)	0.5
B	Glycerin	5.0
	* Sodium Stearoyl Glutamate (RenatuCare SG)	0.2
	Lactic Acid(10%)	0.4
	Water	To 100
C	* Phenoxyethanol&Ethylhexylglycerin(Reanti PEG)	0.6

The following is the formula of a liquid crystal moisturizer tailored for RenatuCare

SG:

Procedure:

- Heat the A,B two phases to 80 °C, and fully stir until each component is evenly dispersed.
- Slowly add phase B into phase A under stirring, homogenize for several minutes, and stir evenly.
- Cool to 45 °C, add phase C, stir and cool to room temperature.

Recommended formula

	INCI Name	Dosage(%)
A	* Sodium Stearoyl Glutamate (RenatuCare SG)	1.0
	CetearylAlcohol	5.0
	Passiflora Incarnata Extract	5.0
	Dicaprylyl Carbonate	3.0
	Coco-Caprylate/Caprates	3.0
	ButylMethoxydibenzoylmethane	2.0
	Ascorbic Acid	1.0
	Dimethicone	0.5
B	Glycerin	5.0
	Water	56.5
C	Phenylbenzimidazole Sulfonic Acid	10.0
	Disodium Phenyl Dibenzimidazole Tetrasulfonate	10.0
	* Phenoxyethanol&Ethylhexylglycerin(Reanti PEG)	0.6

The following is a UV protective
Moisturizing Day Cream for RenatuCare
SG:

Procedure:

- Heat the A,B two phases to 80 °C, and fully stir until each component is evenly dispersed.
- Slowly add phase B into phase A under stirring, homogenize for several minutes, and stir evenly.
- Cool to 45°C , add phase C, stir and cool to room temperature.

Refererce Formula

Astaxanthin Moisturizing Cream

	INCI Name	Percentage	Trade Name	Function
A	Cetearyl Alcohol	1		Emulsifier
	* Triethylhexanoin	3	Regrease TGB	Emollient
	* Caprylic/Capric Triglyceride	2	RegreaseGTCC	Emollient
	Squalane	3		Emollient
	Limnanthes Alba (Meadowfoam) Seed Oil	3		Emollient
	Tocopheryl Acetate	0.5		Antioxidant
B	* Ammonium Acryloyldimethyltaurate/vp copolymer	1	Repoly AVP	Thickener
C	Water	To 100		Solvent
	Glycerin	2		Thickener
	Butylene Glycol	3		Solvent
	* Sodium Hyaluronate	0.02	Reaqua HA	Moisturizer
	* Sodium Stearyl Glutamate	0.1	RenatuCare SG	Emulsifier
D	Astaxanthin	0.005		Skin Conditioner
	* Caprylyl Glycol&1,2-Hexanediol&Hydroxyacetophenone	1	Reanti HCH	Preservative
	* Beta-Glucan	3	Reactive Oat Beta-Glucan	Moisturizer
	Frangrance	0.2		Fragrance

Honey Moisturizing and Nourishing Mask

	INCI Name	Percentage	Trade Name	Function
A	Water	To 100		Solvent
	* Hydroxypropyl Starch Phosphate	1	Rethick HSP	Thickener
	* Sodium Stearoyl Glutamate	0.05	RenatuCare SG	Surfactant
	Xanthan Gum	0.05		Thickener
	* Sodium Hyaluronate	0.05	Reaqua HA	Moisturizer
	Butylene Glycol	3		Moisturizer
	Glycerin	3		Moisturizer
B	* Ammonium Acryloyldimethyltaurate/VP Copolymer	0.9	Repoly AVP	Thickener
	* Cyclopentasiloxane	2	Reshine D5	Emollient
	Squalane	2		Emollient
C	* Beta-glucan	2	Reactive Oat Beta-Glucan	Moisturizer
	Mel	1.5		Moisturizer
	* Caprylyl Glycol&1,2-Hexanediol&Hydroxyacetophenone)	1	Reanti HCH	Preservative

Refererce Formula

Plant Extract Curcumin Lotion

	INCI Name	Percentage	Trade Name	Function
A	* Cetearyl Ethylhexanoate	2	Regrease EHC	Emollient
	Limnanthes Alba (Meadowfoam) Seed Oil	1		Emollient
	Cocos Nucifera (Coconut) Oil	1		Emollient
	Squalane	1		Emollient
B	Water	To 100		Solvent
	* Ammonium Acryloyldimethyltaurate/VP Copolymer	0.5	Repoly AVP	Thickener
	Xanthan Gum	0.1		Thickener
	* Sodium Stearyl Glutamate	0.1	RenatuCare SG	Emulsifier
	* Sodium Hyaluronate	0.02	Reaqua HA	Moisturizer
	Hydrogenated Lecithin	0.1		Skin Conditioner
	Glycerin	2		Moisturizer
C	Tetrahydrocurcumin	0.5		Skin Conditioner
	Butylene Glycol	4		Solvent
	* PEG/PPG-14/7 Dimethyl Ether	1	Reaqua 147	Moisturizer
D	* Caprylyl Glycol&1,2-Hexanediol&Hydroxyacetophenone	1	Reanti HCH	Preservative
	Frangrance	0.2		Fragrance

Make Up Cleansing Gel

	INCI Name	Percentage	Trade Name	Function
A	Water	To 100		Solvent
	* Acrylates/C10-30 Alkyl Acrylate Crosspolymer	0.6	Repoly 1020	Thickener
	* Sodium Stearoyl Glutamate	0.2	RenatuCare SG	Surfactant
	* Hydroxypropyl starch phosph	1.5	Rethick HSP	Thickener
	1,3-Propylene Glycol	4		Moisturizer
	Glycerin	2		Moisturizer
B	* Phenoxyethanol&Ethylhexylglycerin	0.8	Reanti PEG	Preservative
	* PEG-7 Glyceryl Cocoate	10	Reachin HE	Emollient
	32%Sodium hydroxide	q.s		pH Regulator

05. Contact information

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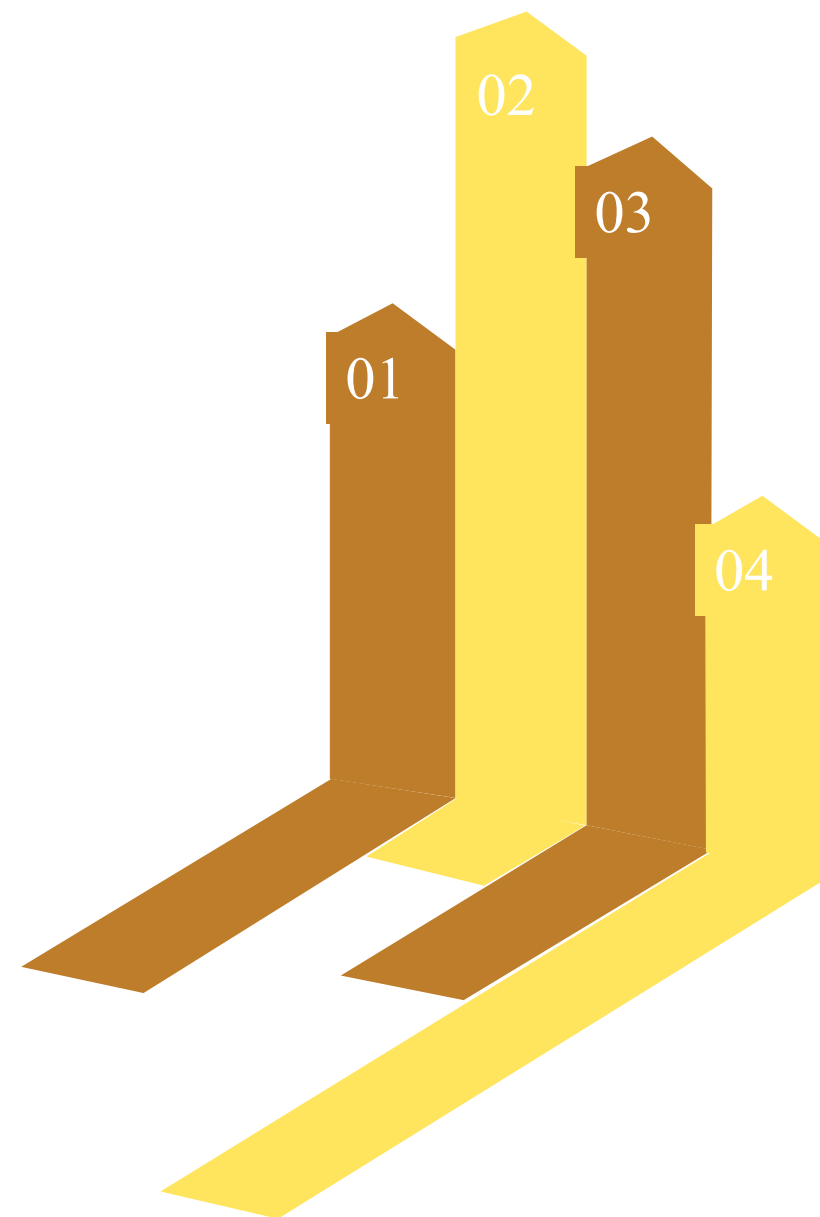
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Thanks for
listening

— Reachin chemical

