



COVID-19 Statement

Lubrizol Life Science Beauty offers innovative ingredients and formulation expertise to create the most effective hand cleansers and sanitizers available. From surfactants to popular rheology modifiers like Carbopol®, we offer a full array of products to meet growing market demands.

At the moment, the Lubrizol Life Science business is experiencing unprecedented increases in demand of our Carbopol® polymers related to the global shortage of hand sanitizer. The landscape is very dynamic and changing daily. Currently we are unable to fulfill new customer orders for the traditional grades of Carbopol® polymers used in hand sanitizer applications.

Consistent with our mission of advancing solutions that inspire a healthier, more beautiful and comfortable life, Lubrizol continues to explore ways to meet customer needs during these extraordinary circumstances.

Please contact your Lubrizol representative to get up to date information, if you do not have a Lubrizol representative visit our website for a list of our distributor partners (https://www.lubrizol.com/Personal-Care/Distributors).





Celebrating your hands

Human hands are unique and give us the power to act, the ability to care and share.

Although the virus does not attack the skin, excessive hygiene and prolonged use of personal protective equipment have damaged the skin of our hands.

Now, that we are progressively able to take the hand of all our loved ones again, it is time to celebrate our hands.

While maintaining a good hygiene routine, let's provide the care our hands deserve.





Wash your hands!

COVID-19 virus primarily spreads through droplet and contact transmission. Contact transmission means by touching infected people and/or contaminated objects or surfaces. Thus, your hands can spread virus to other surfaces and/or to your mouth, nose or eyes if you touch them.



Handwashing is one of the most important things we can all do to stop the spread the virus.





Hand sanitizer, on-the-go hygiene solution

In the US, **45%** of adults were **using** hand sanitizer more often, in comparison to the previous year, as of Dec 2019.

COVID-19 has accelerated the use of hand sanitizers in consumers' sanitization routines



60% is the minimum alcohol content in a hand sanitizer to be considered effective against known coronavirus strains.





Extra care for hands

Repetitive hand-washing and long-term use of protective gloves can damage the integrity of the skin as a barrier, and causing hands to become:

Dry and Irritated

 detergents and disinfectants can impair the hydrolipidic mantle on the skin's surface, causing irritation, redness and cracked skin

Pigmented

 without its natural protective barrier hands become more susceptible to sun and UV damage, leading to spots and roughness

Maceration

- latex gloves trap moisture against the skin leading to a hyper-hydration state
- characterized by whitening, softening, and wrinkling of the skin





No matter what our hands go through, they get all the love they deserve













Mild White Shell Foaming Hand Cleanser

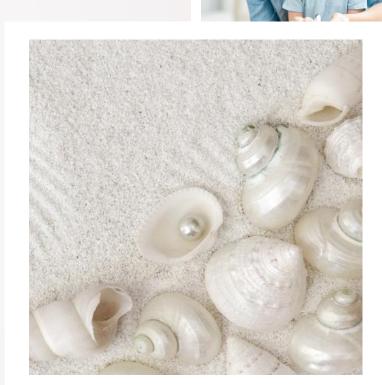
CL-F0073

Begin with the most basic step

A gentle foaming hand wash with iridescent shell-like appearance that cleanses sensitive skin without over-drying, for hands that look and feel clean.

Why it's special:

- Mild foaming cleanser to use every day
- Leaves the skin feeling soft and moisturized
- Pearlized formula, creating an eye-catching sheen
- Surfactants used are non-sulfated







Mild White Shell Foaming Hand Cleanser



Product Properties:

Appearance: White pearlized liquid

Viscosity (mPa·s*): 500 - 700 Yield Value: 20 - 30 dyn/cm² Surfactant: 7.0% TS/actives

*Brookfield®LV DV2T Viscometer (Brookfield A METEK, Inc.) spindle #62 @ 20 rpm, 25 ℃ @ 24 hours

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		INCI Name	Weight %	Trade Name	
Α.	1.	Deionized Water	65.62		
	2.	Acrylates Copolymer (25.4%)	6.70	Carbopol® Aqua SF-3 polymer	
	3.	Disodium Laureth Sulfosuccinate (and) Sodium Cocoyl Isethionate (and) Cocamidopropyl Betaine (32%)	21.88	Chemoryl™ SFB-10SSB surfactant	
	4.	Sodium Hydroxide (20%)	1.30		
	5.	Fragrance, Artesian Springs II	0.50		
	6.	Phenoxyethanol	1.00		
	7.	Methyl Gluceth-10	1.00	Glucam™ E-10 humectant	
	8.	Glycol Distearate (and) Laureth-4 (and) Cocamidopropyl Betaine (40%)	2.00	Quickpearl™ PSB3 pearlizing agent	(

- Enables suspension in a low viscosity surfactant system
- Provides mild cleansing with excellent foaming properties
- Sodium benzoate preserved
- Delivers a soft and moisturized skin sensory after wash
- Cold processable
- Pearlizes the formula, creating an eye-catching sheen





Sparkling Lemon Anti-Bacterial Hand Soap

oap

Squeeze the day

Lather up with this pearlized liquid hand soap and enjoy the lemon scent to subtly refresh the skin. The perfect cleanser to wash away germs and provide a nice skin feel that lasts all day.

Why it's special:

- Instantly foams
- Skin feels fresh and renewed
- Refreshing lemon aroma







Sparkling Lemon Anti-Bacterial Hand Soap

CL-H0028



Product Properties:

Appearance: Viscous, opaque, pearlized liquid

oH: 4.7 - 5.2

Viscosity (mPa·s)*: 5,000 - 9,000

Turbidity (NTU): >80

Stability: Passed 3 months at 45°C;

passed 5 freeze/thaw cycles

*Brookfield® RV, DVII+ Viscometer (Brookfield AMETEK, Inc.) spindle #4 @ 20 rpm, 25°C @ 24 hours

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		INCI Name	Weight %	Trade Name
Α.	1.	Deionized Water	49.72	
	2.	Disodium EDTA	0.05	
	3.	Acrylates / Beheneth-25 Methacrylate / HEMA Crosspolymer-2 (25% TS)	8.00	Carbopol® SMART 3000
	4.	Cetrimonium Chloride (29% active)	6.88	
B.	5.	Deionized Water	15.00	
	6.	Lauramine Oxide (28% active)	10.60	Chemoxide™ LO-PF •surfactant
	7.	Cocamide MEA	1.00	Amidex™ CME surfactant
C.	8.	Benzalkonium Chloride (50% active)	0.26	
	9.	PEG-120 Methyl Glucose Dioleate (70% active)	1.00	Glucamate™ DOE-120 •syrup thickener
D.	10.	Deionized Water	1.00	
	11.	Sodium Benzoate	0.25	
E.	12.	Fragance (Parfum)	0.50	
	13.	Citric Acid (50% solution)	~1.30**	
F.	14.	Glycerin	1.50	
	15.	Silica (and) Titanium Dioxide (and) Tin Oxide	0.10	
G.	16.	Deionized Water	~2.84***	
	** q.	.s. to pH 5.0		
		q.s. to 100		

 Provides thickening, honey-like flow and suspension capability

 Excellent mild, foamboosting surfactant

- Naturally derived
- Improves the formulation mildness
- Provides good skin feel

Lubrizol makes no representation or warranty that any claims associated with the above formulation have been approved in every jurisdiction. It is the user's sole responsibility to verify that any antibacterial, antimicrobial, or other active ingredients are registered for use in the relevant jurisdictions.





Nonionic thickeners for quat-containing cleansers

When formulating a hand wash with antimicrobial claims, active ingredients such as quaternary ammonium compounds (quats) may be used.

Such quats are not compatible with anionic ingredients such as surfactants and some thickeners, hence, it is advised to use nonionic ingredients in the system.

Carbopol® SMART 3000 polymer

Acrylates / Beheneth-25 Methacrylate / HEMA Crosspolymer-2

- ✓ Delivers performance independent of formula pH
- ✓ Offers high compatibility with a wide range of ingredients, including cationic polymers, fragrances, and preservatives
- ✓ Builds formulations that have exceptional suspension power, enabling striking visuals
- ✓ Simple, easy-to-use liquid thickener requires no neutralization and can be processed continuously

Glucamate™ DOE-120 thickener

PEG-120 Methyl Glucose Dioleate

- ✓ Reduces irritancy of surfactants
- ✓ Exceptionally mild and non-irritating to eyes and skin
- ✓ Very light, pleasant skin feel
- Efficient nonionic associative thickener
- ✓ Surfactant compatibility; enhanced thickening with mild amphoterics
- √ Synergistic thickening with salt
- √ Good foam generation







3 solutions to stabilize Hydroalcoholic Gel Formulations

Carbopol® powder polymers

Cost-efficient

Carbopol® Aqua SF-1 polymer

Easy-to-use

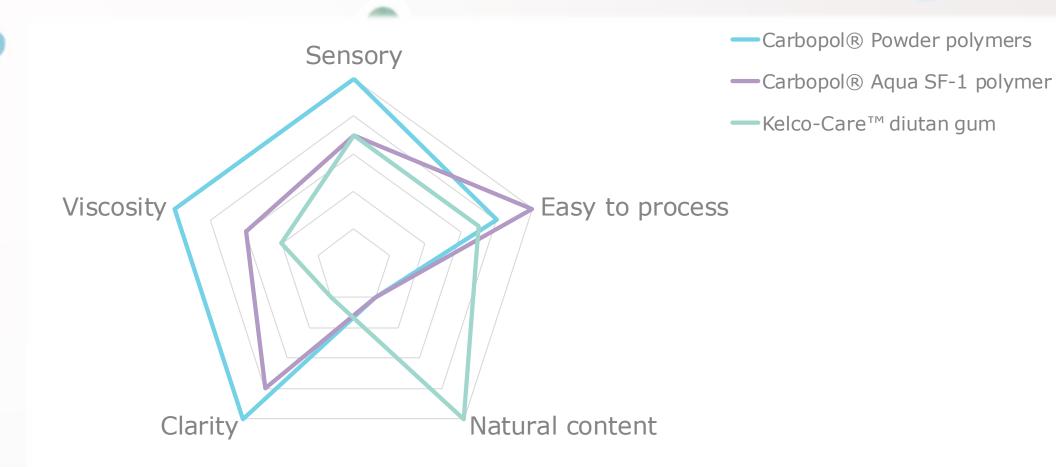
Kelco-Care™ diutan gum

Naturally-derived





Overall Performance of our solutions







Kelco-Care™ diutan gum

A polysaccharide made by fermentation to thicken hand sanitizing gels



INCI

Sphingomonas
Ferment Extract
CFDA approved



SUSTAINABILITY

Vegan & Renewable Carbon Index (RCI) = 0.95



RECOMMENDED USE LEVEL

0.05 - 0.5 wt% As supplied



PROCESSING TEMPERATURE

Cold Processable



SHELF LIFE

24 Months



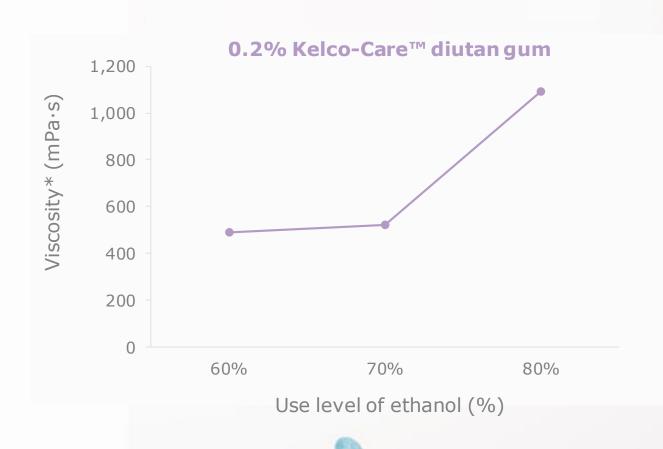
Lubrizol has a global agreement with CP Kelco® to bring Kelco-Care™ diutan gum to the beauty markets.







Kelco-Care™ diutan gum is a unique nature-based thickener compatible with high level of alcohol



Viscosity increases at 80% ethanol level

Boost viscosity with small amount of electrolytes

Silky after-feel



Hand sanitizers with Kelco-Care™ diutan gum are turbid





Carbopol® Aqua SF-1 polymer

Now an alternative to powders



INCI NAME: Acrylates Copolymer

PHYSICAL PROPERTIES:

- Easy-to-use liquid form
- Alkali-swellable emulsion polymer
 - pH sensitive monomer
 - Hydrophobic monomer
- 30% TS polymer as supplied



TYPICAL USE LEVEL: 4-8 wt% as supplied (1.5 to 3.0 wt% TS)



60wt% Ethanol 70wt% Ethanol 80wt% Ethanol

Clear gels with Carbopol® Aqua SF-1 polymer





Hand Sanitizer Gel with Ethanol from 60 to 80wt%

INCI Name	Weight %	Weight %	Weight %	Trade Name
1. Deionized Water	34.80	24.88	14.90	
2. Acrylates Copolymer	5.00	5.00	5.00	Carbopol® Aqua SF-1 polymer
3. Aminomethyl Propanol	0.20	0.12	0.10	
4. Alcohol Denat., Ethanol	60.00	70.00	80.00	

Product Properties:			
Appearance:	Clear Gel	Clear Gel	Clear Gel
pH:	7.3-7.6	7.3-7.6	7.3-7.6
Stability*	12 weeks	12 weeks	6 weeks
*at RT, 4°C, 45°C and after 5 freeze/thaw cycles			(on going)





Gentle Hand Sanitizing Gel CL-H0017(LA)

Cleanliness begins with clean hands

All you need to keep hands germ-free and hydrated when soap and water is not available. This crystal clear gel provides hand cleansing and conditioning, while keeping hands pleasant to the touch.

Why it's special:

- 70% of Alcohol
- Light and low-sticky feel
- Provides a pleasant sensation of freshness and cleanliness
- Leaves hands supple and moisturized







Gentle Hand Sanitizing Gel CL-H0017(LA)



<u>Product Properties</u>:

Appearance: Clear ge

oH: 7.0 - 7.5

Viscosity (mPa·s)**: 3,500 - 4,500

Γurbidity (NTU)***: 2 – 10

Stability: Passed 3 months at 45°C; 2 months at 50°C; passed 5 freeze/thaw

**Brookfield @ 20 rpm, 25°C, #4 spindle,

**HF Scientific, Inc., Micro 100 Turbidimeter

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	INCI Name	Weight %	Trade Name
A. 1.	Deionized Water	28.65	
2.	Carbomer	0.50	Carbopol® Ultrez 10 polymer •
В. 3.	Aminomethyl Propanol	0.35	
C. 4.	Alcohol	70.00	
5.	Methyl Gluceth-20	0.50	Glucam™ E-20 humectant •

- Lends exceptional clarity
- Light, fresh feel
- Low residual tack
- Provides mildness and helps to make the skin supple and pleasant to the touch





Suitable Humectants and Emollients

Trade Name	INCI Name
Glucam™ E-10 humectant	Methyl Gluceth-10
Glucam™ E-20 humectant	Methyl Gluceth-20
SilSense® Copolyol-1 silicone	PEG-33, PEG-8 Dimethicone (and) PEG-14
SilSense® SW-12 silicone	Dimethicone PEG-7 Cocoate
Hydramol™ TGLester	Polyglyceryl-3 Laurate
Hydramol™ PGPL ester	PEG/PPG-8/3 Laurate
Hydramol™ PGPD ester	PEG/PPG-8/3 Diisostearate
Hydramol™ PGDS ester	PEG-90 Diisostearate
Schercemol™ DIS ester	Diisopropyl Sebacate
Solulan™ L-575 lanolin derivative	PEG-75 Lanolin

NOTE: 0.3-0.5 wt% addition of these emollients will not impact the final product clarity.







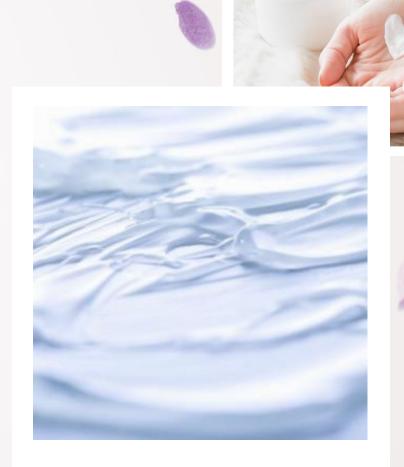
Metro Hand Cream M-0035(LA)

Restore the vital moisture back

Take a dip and stay hydrated with this shiny and smooth hand cream formulated to bring balanced emolliency and hydration to pamper the skin.

Why it's special:

- Light and pleasant sensory to the hands
- Provides emolliency to the skin
- Immediate and long-lasting moisturizing effect
- Helps to lock skin moisture for soft, smooth hands







Metro Hand Cream M-0035(LA)



Product Properties:

Appearance: White emulsion

H: 5.2 - 5.8

/iscosity (mPa⋅s)*: 17,000 - 24,000

ecommended Packaging: Tube

*Brookfield® RV, DVII+Viscometer (Brookfield AMETEK, Inc.) spindle #6 at 20 rpm, 25 °C at 24 hours

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		INCI Name	Weight %	Trade Name
Α.	1.	Deionized Water	74.25	
	2.	Disodium EDTA	0.10	
	3.	Propanediol	6.00	
	4.	Carbomer	0.15	Carbopol® Ultrez 10 polymer •
B.	5.	Methyl Glucose Sesquistearate	0.50	Glucate™ SS emulsifier
	6.	Potassium Cetyl Phosphate	0.80	
	7.	Cetyl Alcohol	3.00	
	8.	Cetyl Ethylhexanoate	3.00	Schercemol™ CO ester •
	9.	Glyceryl Stearate	4.00	
	10.	Astrocaryum Murumuru Seed Butter	4.00	
C.	11.	Sodium Hydroxide (18% solution)	0.20	
	12.	Fragance (Parfum)	0.50	
	13.	Phenoxyethanol, Ethylhexylglycerin	0.50	
	14.	Water, Glycerin, Calcium Pantothenate, Xanthan Gum, Urea, Caprylyl Glycol, Glucose, Magnesium Lactate, Potassium Chloride, Potassium Lactate, Magnesium Chloride, Sodium Citrate, Citric Acid, Ethylhexylglycerin	3.00	Ion-moist® 4men molecular film
		COLUMN TO THE PARTY OF THE PART		

- Promotes rheology control
- Light and pleasant sensory to the hands
- Imparts emolliency

Provides superior skin hydration





Key active ingredients for hand care



Soothing/ Sensitive skin

Fensebiome™ peptide



Restores sensitive skin through the microbiota

Reinforces barrier function and prevents dehydration

Antarcticine® marine ingredient



Protects the skin from dryness and erythema

Restructuring and anti-wrinkle properties

Actisoothe® advanced botanical ingredient



Soothing skin discomforts

Reduces irritation due to physical and chemical agents



Moisturizing/ Regenerating

Lipomoist™2013 molecular film



Immediate and long-term hydration benefits

Soft, light and pleasant sensation

Xpertmoist® molecular film



Healing & regenerating agent

Suitable for extreme skin dryness conditions

Actiphyte™ botanical extracts



Single botanical extracts with multiple benefits for the skin



Protection/ Prevention

Lumicease™ blue ingredient



Protects against outdoor and indoor light damage

Minimizes the main signs of digital and photoaging

Pollushield™ functional ingredient



Protects the skin from damage caused by urban pollution

Reduces dullness and dark spots for a better complexion

Lipochroman® molecule



Triple protection from ROS, RNS and RCS

Detoxifies to prevent signs of premature aging





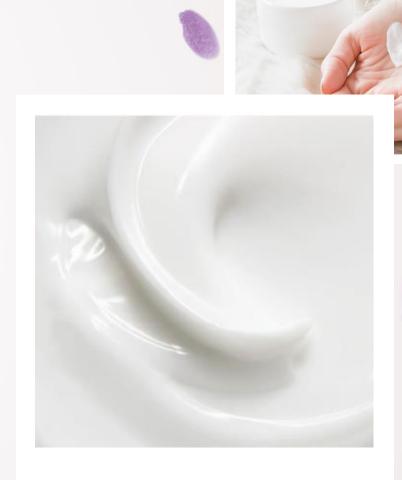
Restoring hand cream

First aid for hands

Help the skin with this rich, nourishing cream that repairs, protects and strengthens sensitive and extremely dehydrated hands.

Why it's special:

- Fast absorption and non-greasy formula
- Relieves stinging sensations
- Nourishes and reinforces barrier function
- Protects the skin from dryness and erythema







Restoring hand cream



Product Properties:

Appearance: Cream
Color: White to Off White
pH: 5.5 - 7.0

Viscosity = 20000 - 80000 mPa·s *Brookfield RVT @ 10 rpm, 25°C, #6 spindle

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		INCI Name	Wt %	Trade Name
Α.	1.	Water (Aqua)	44.22	
	2.	Betaine	3.00	
	3.	Phenoxyethanol	0.40	
	4.	Phytic acid, Water (Aqua)	0.10	
	5.	Carbomer	0.30	Carbopol® Ultrez 10 polymer •
	6.	Methyl Gluceth-20	3.00	Glucam™ E-20 humectant
	7.	Propanediol	10.00	
	8.	Potassium Cetyl Phosphate	2.00	
B.	9.	Butyrospermum Parkii Butter	4.00	
	10.	Diisopropyl Sebacate	3.00	Schercemol™ DIS ester •
	11.	Isopropyl Isostearate	3.00	Schercemol™ 318 ester •
	12.	Glyceryl Stearate	3.00	
	13.	Cetearyl Alcohol	3.00	
	14.	Dimethiconol Stearate	2.00	Silsense® IWS silicone
C.	15.	Water (Aqua), Xanthan Gum, Caprylyl Glycol, Phenoxyethanol, Glucose, Chondrus Crispus (Carrageenan) Extract, Ethylhexylglycerin	10.00	Lipomoist™ 2013 molecular film CPE
	16.	Water (Aqua), Pseudoalteromonas Ferment Extract, Caprylyl Glycol	5.00	Antarcticine® marine ingredient (
	17.	Tocopheryl Acetate	0.50	
	18.	Butylene Glycol, Water (Aqua), Citric Acid, Acetyl Hexapeptide-49	2.00	Delisens [™] peptide solution
	19.	Water (Aqua), Acetyl Heptapeptide-4, Caprylyl Glycol	1.00	Fensebiome™ peptide solution
D.	20.	Water (Aqua), Sodium Hydroxide	0.48	
ation.				

 Brings viscosity and smooth texture

 Mild naturally derived ingredient, imparts hydration to skin

 Light sensory and luxury softness

 Provides skin moisturization benefits that last all day

 Protects the skin from dryness and erythema

Attenuates skin itch

 Reinforces the skin barrier function

LUBRIZOL LIFE SCIENCE



Caring about health care heroes For damaged hands that save lives

LLS Beauty in Barcelona is caring for health care heroes around the globe during the COVID-19 pandemic by providing hand cream to hospitals. More than 10,000 jars have been donated already!

From Spain to US, Singapore and many other places, dozens of thank you notes from doctors and nurses:



Thank you LLS Beauty for the amazing hand cream! My fingers were cracked and dry from the long shifts at the hospital and the cream has helped so much! From myself and the medical staff we thank you for your help in fighting this pandemic!

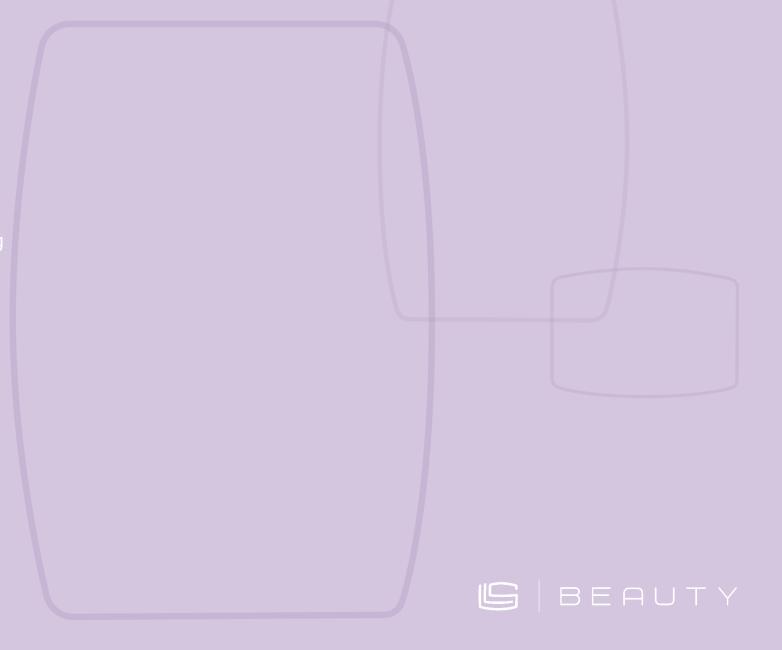


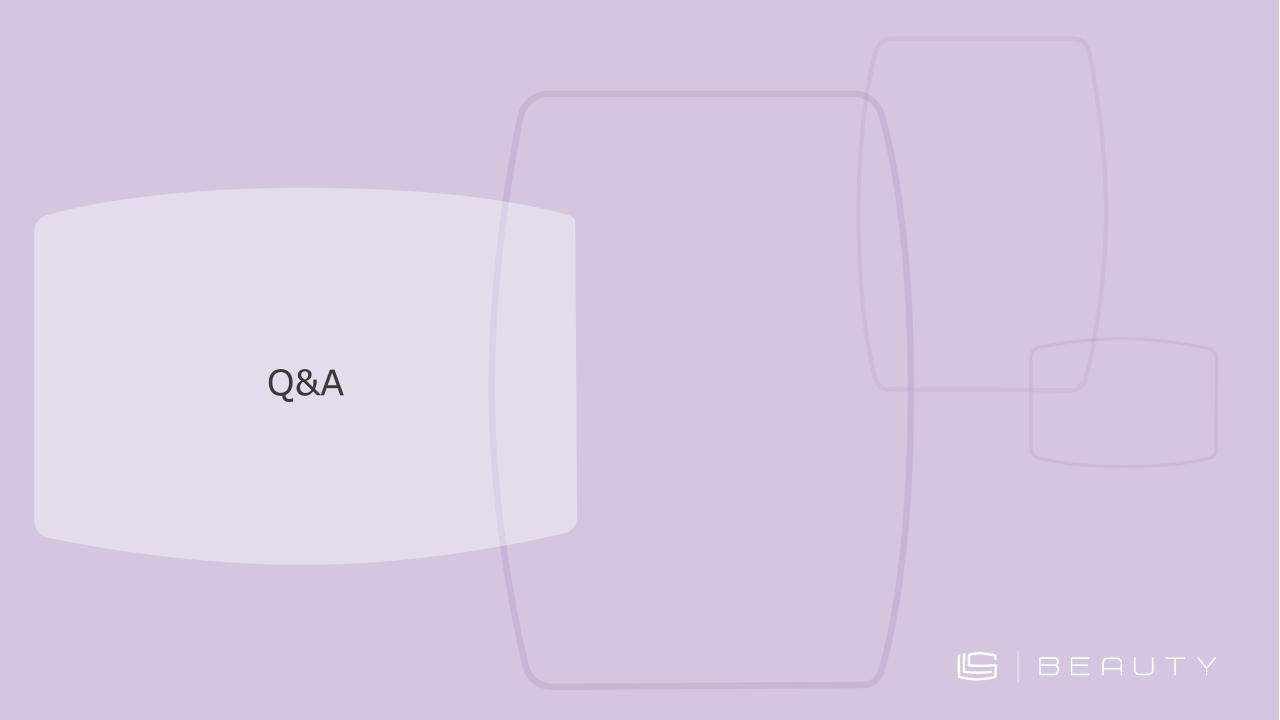
With your help, we can provide more jars to health care heroes. Contact us to be part of this initiative.



Thank you

For more information, samples and/or starting formulations with complete processing instructions and supplier references, please contact your sales representative







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- Brookfield® is a registered trademark of Brookfield AMETEK, Inc.





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Thank You

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Driven by Innovation, Powered by Partnership

