



A Subsidiary of PETRONAS Chemicals Group



Range of Esters for Modern Formulations

.....

The power of smart ingredients for personal care



Emfinity® IL

INCI: ISOAMYL LAURATE

Naturally derived emollient that is readily **biodegradable and environmentally friendly**.

Provides **light and soft texture** with a non-tacky feel.

Combining some of the sensory benefits of cyclomethicones, it delivers an **excellent dry feel and non-greasy texture**, ideal for both hair and skin care formulations.

Offers **good makeup-removing** properties.

- Low viscosity
- Fast-absorbing emollient
- Good compatibility with Dimethicones

APPLICATION

Skin & sun care, hair care, colour cosmetics, toiletries

Face cream/serum, body lotion/cream, hand cream, sunscreen stick/cream/spray, makeup remover, face cleanser, lip care, hair treatment, conditioner, lip colour, foundation, concealer

PARAMETERS	VALUES/CHARACTERISTICS
Appearance	Clear colourless liquid
Spreadability	High



Emfinity® DNPG

INCI: NEOPENTYL GLYCOL DIHEPTANOATE

A **light, quick-absorbing** emollient that delivers a **silky, non-greasy** skin feel.

Forms a **non-occlusive** protective layer and helps **retain skin moisture**.

Improves spreadability in skin, hair and colour cosmetics formulations.

Offers some sensory **benefits of cyclomethicones**.

- Non-tacky texture
- Good slip
- Pleasant dry feel

APPLICATION

Skin & sun care, colour cosmetics, hair care, toiletries

Face cream, eye serum, lip balm, sunscreen stick/cream/spray, body lotion, primer, foundation cream/stick, concealer, BB cream, lipstick, styling cream, conditioner, cleansing milk, antiperspirants/deodorants

PARAMETERS	VALUES/CHARACTERISTICS
Appearance	Colourless to light yellow liquid
Odour	Characteristic
Spreadability	High



Emfinity® PTIS

INCI: PENTAERYTHRITYL TETRAISOSTEARATE

A rich emollient that offers a **cushiony skin feel, high gloss film without greasy feel.**

Its **film-forming** capabilities help **reduce moisture loss**, delivers a **smooth texture** and improves slip without leaving a sticky residue.

Acts as a **viscosity enhancer** and a good wetting, dispersing agent for pigments and UV filters.

- Effective alternative to castor oil
- Binder for decorative cosmetics
- Good compatibility with ester oils

APPLICATION

Colour cosmetics, skin & sun care, hair care

Lipstick, eye shadow, blush, powder, eye lash, bronzer, foundation, highlighter, concealer, primer, lip serum/oil, face cream, eye serum, body lotion, cleansing oil/milk, hair treatment, conditioner

PARAMETERS	VALUES/CHARACTERISTICS
Appearance	Colourless to dark yellow liquid
Spreadability	Low



Emfinity® GTIS

INCI: TRIISOSTEARIN

A natural, multifunctional emollient that acts as a **skin conditioning agent**. Provides **good cushioning and film-forming properties**.

Enhances **moisture retention** and acts as a skin barrier.

Delivers **high gloss** and **strong adhesion** for colour cosmetics.

- High viscosity
- Odourless
- Non-greasy feel

APPLICATION

Colour cosmetics, skin & sun care, hair care, toiletries

Lip gloss, lipstick, eye shadow, blush, compact powder, bronzer, foundation, BB cream, face mask, body milk, lip balm, hand cream, shampoo, hair treatment, intimate hygiene

PARAMETERS	VALUES/CHARACTERISTICS
Appearance	Colourless to dark yellow liquid
Spreadability	Low



Emfinity® GSC

INCI: GLYCERYL STEARATE CITRATE

A **natural multifunctional ester** that unlocks smooth, pleasant after feel. Acts as an emollient and an O/W emulsifier.

Enhances viscosity and offers light to rich formulations with uniform spreading and easy pick up. Provides different **textures** ranging from **fluid lotions to butters**.

Delivers **good compatibility** with oils and UV filters.

- Light, soft skin feel
- Easy handling, dust-free process
- Reduced greasy residue

APPLICATION

Skin & sun care, hair care, colour cosmetics
 Body lotion/milk/butter, face/eye cream/serum, hand cream, eye care, milky cleanser/makeup remover, hair treatment, conditioner

PARAMETERS	VALUES/CHARACTERISTICS
Appearance	Ivory Flakes
Melting point (°C)	58 - 68



Emfinity[®] CP

INCI: CETYL PALMITATE

A natural emollient that **improves consistency**, spreadability and the sensory profile of formulations.

Provides a **pleasant skin feeling** and reduces greasiness in oil-rich formulations.

Enhances moisturisation of the skin.

- Delivers smooth feel
- Ideal moisturiser for dry skin

APPLICATION

Skin & sun care, hair care, colour cosmetics, toiletries

Moisturising cream, face & hand cream, body lotion, baby care, lip care, face cleansers, hair mask, conditioner, wipes, shower products, eye lash/liner, lipstick, foundation, antiperspirants/ deodorants

PARAMETERS	VALUES/CHARACTERISTICS
Appearance	Ivory White Waxy Solid
Melting point (°C)	49 - 55
Odour	Mild Characteristic



Emfinity® EHP-100

INCI: ETHYLHEXYL PALMITATE

A traditional, **cost effective**, yet **versatile emollient** that acts as a solvent for actives, UV filters and pigments, as well as a fragrance enhancer due to its blending and fixing properties.

This lightweight ester offers a **medium-spreading** profile, with good permeability.

Provides a **smooth, silky after feel** with non heavy glide.

Emfinity® EHP softens and moisturises the skin while effectively reducing oiliness in formulations.

- Silky, dry-slip finish
- Alternative to mineral oil
- Non-tacky

APPLICATION

Skin & sun care, colour cosmetics, hair care, toiletries

Body lotion, face cream, lip balm, hand cream, cleansing oil/balm/lotion, foundation, blush, concealer, lip colour, hair treatment, conditioner, shower products, wipes, antiperspirants/ deodorants

PARAMETERS	VALUES/CHARACTERISTICS
Appearance	Clear Liquid
Spreadability	Medium



empowering beauty through **empathic** consumer engagement, fuelled by an **infinite** array of cosmetic ingredients solutions.

Emfinity® CGSA 200 B

INCI: CAPRYLLOL GLYCERIN / SEBACIC ACID COPOLYMER

Novel, patented and entirely bio-based emollient that is readily **biodegradable and environmentally friendly**.

Provides undetectable protection for both skin and scalp, while also conditioning and **delivering instant moisturising effect**.

It gives **instant skin's glow**, its velvety texture leaves a **cushioned finish**. When applied to hair, it **facilitates easy combing** and leaves it feeling soft and shiny.

This **microbiome friendly** emollient helps to maintain the skin's natural barrier, preventing moisture loss and shielding the skin from environmental aggressors, which is of a benefit especially for the sensitive skin.

The copolymer helps to protect the skin from UV damage by **enhancing SPF effectiveness** of the formulation.

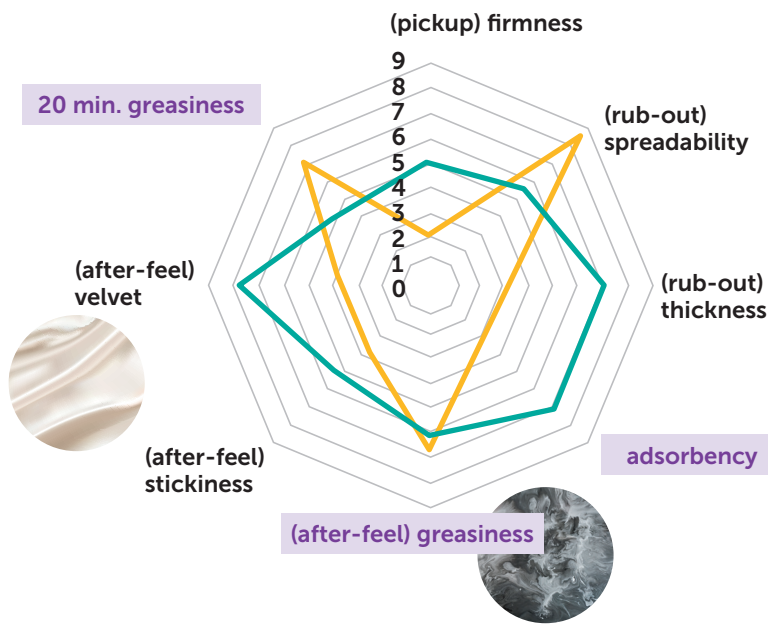
- Medium viscosity
- Clear light yellow liquid
- High refractive index
- Excellent compatibility with UV filters and other ingredients
- Reduce greasiness of other materials

APPLICATION

Suitable for all cosmetic applications

PARAMETERS	VALUES/CHARACTERISTICS
Appearance	Colourless to light yellow
Odour	Odourless to gentle coconut "natural"
Viscosity	200 cSt
Refractive Index	1.45

Sensory Evaluation Comparison with jojoba oil



- From pickup to initial spread, Emfinity® CGSA 200 B feels **richer and more nourishing** than jojoba oil.
- It is **absorbed faster** in skin, reducing the initial oiliness feel to reveal a distinctive **velvet finish** while jojoba oil still lingers.

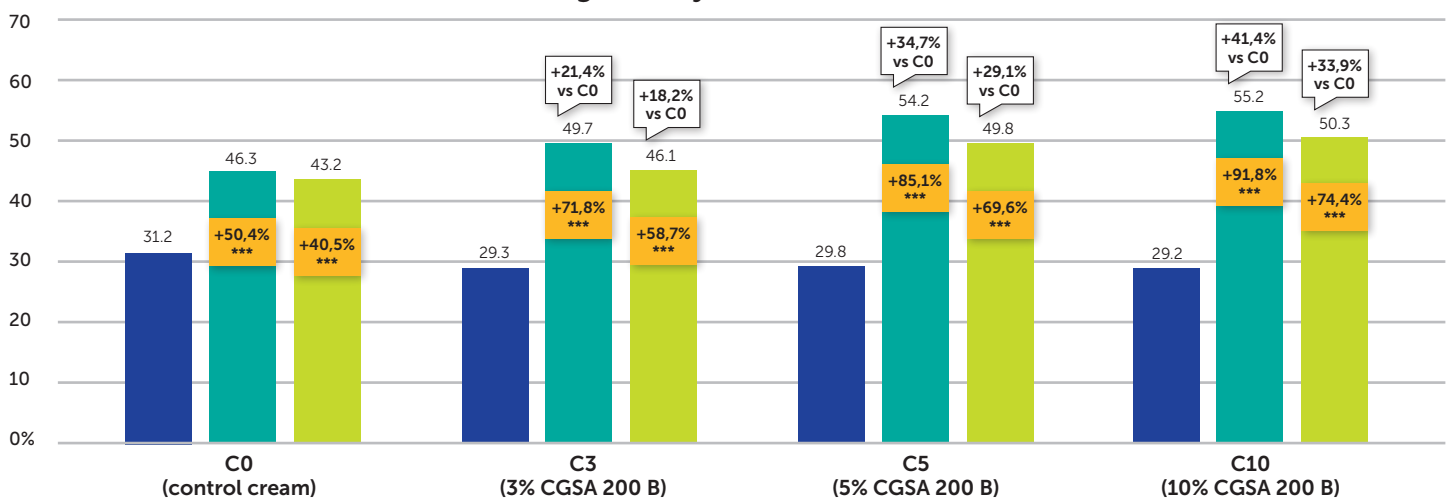
● CGSA 200 B ● jojoba oil

In-Vivo Test Results: Moisturizing Efficacy of Emfinity® CGSA 200 B

Moisture content
(Arbitrary Unit)

Moisturizing Efficacy of Test Materials

● Baseline ● 30 mins ● 1 hr

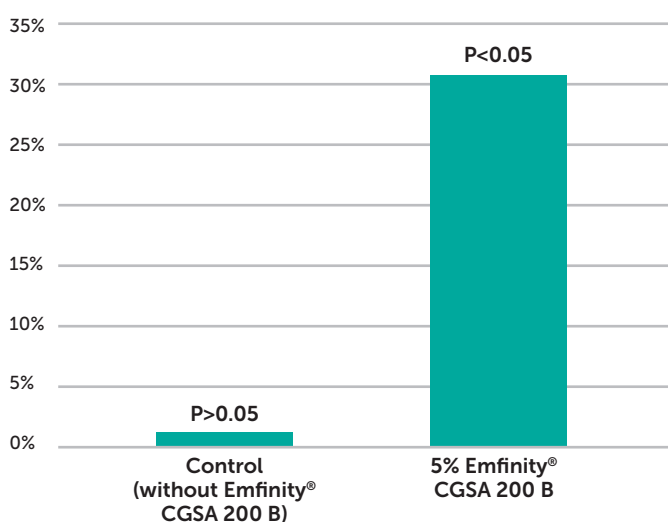


**** Statistical significant ($p < 0.05$)

Emfinity® CGSA 200 B gives instant hydration at 3% with significant increase of moisture content from baseline, after 30 mins and after 1 hour.

In-Vitro Test Protocol: Dry Combing Test

Dry Combing force reduction



Hair tresses treated with leave-on conditioner formulated with 5% of Emfinity® CGSA 200 B show reduction of dry combing force by 30% compared vs untreated.

Instrument: Dia-Stron MTT 175, Hair type: Caucasian hair

Solubility Tests of organic UV filters in Emfinity® CGSA 200 B

UV FILTER (liquid form)	Solubility (Wt/Wt%)			
	RT*	45°C**	-10°C**	Freeze Thaw – 3 cycles***
Ethylhexyl Methoxycinnamate	50	50	50	50
Ethylhexyl Salicylate	50	50	50	50
Homosalate	50	50	50	50
Octocrylene	50	50	50	50

Preparation method: The sample observed for precipitation, haziness, crystallization and colour change.

* The data reported after 1 month of storage at Room Temperature

** The data reported after 1 month of storage at 45°C & -10°C

*** The data reported after 3 Freeze Thaw cycle based with Freezing temperature set at -10°C

UV FILTER (powder form)	Solubility (Wt/Wt%)		
	RT*	4-6°C**	Freeze Thaw – 3 cycles***
Butyl Methoxydibenzoylmethane	16	12	14
Ethylhexyl Triazone	18	18	20
Bis-Ethylhexyloxyphenol Methoxyphenyl Triazine	4	4	6

Preparation method: Weigh the required amount of UV filter and mix with pre weighed emollient. Heat the mix to 80°C to 85°C for 40 mins to get a clear homogenous phase. Bring the homogenous mix to the RT and store at different condition for observation. The sample observed for precipitation, haziness, crystallization and colour change.



empowering beauty through **empathic** consumer engagement, fuelled by an **infinite** array of cosmetic ingredients solutions.

Emfinity® CSGA 600 B

INCI: CAPRYLOL GLYCERIN / SEBACIC ACID COPOLYMER

Emfinity® CSGA 600 B is a **novel, patented, entirely bio-based emollient** that delivers enhanced sensory and performance for color cosmetics application.

It provides high gloss and **instant glow** for skin and lips.

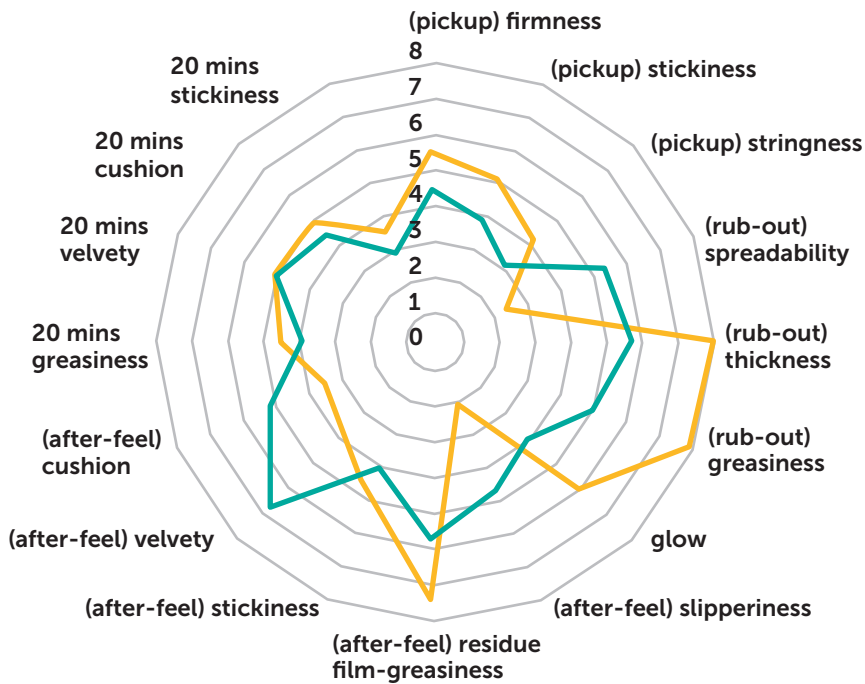
This ingredient provides a unique, long term, **light velvety after-feel**.

Emfinity® CSGA 600 B offers good adhesion to skin and low color transfer rate, making it **ideal for long wear cosmetics**.

- Light-yellow liquid
- High gloss
- Low spreadability
- Rich sensory
- Good substantivity
- Low color transfer rate

PARAMETERS	VALUES/CHARACTERISTICS
Appearance	Light yellow liquid
Odour	Odourless to very light coconut "natural"
Viscosity	500 cP
Refractive Index	1.46

Sensory Evaluation Comparison with Emfinity® CGSA 200 B



- Emfinity® CGSA 600 B delivers **higher gloss and long-lasting substantivity**.
- **Velvet sensation with cushion effect** after 20 mins from application.
- **Ideal tackiness** for long wear color cosmetics.

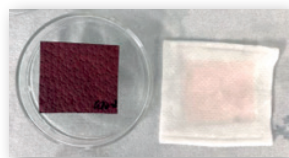
100% RM avg

● 200 B-avg ● 600 B-avg

Color Transfer resistance compared to benchmark



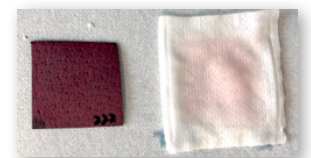
Control*



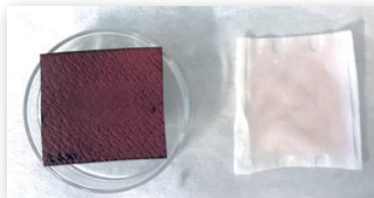
Octyldodecanol



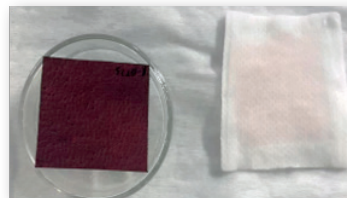
GTCC



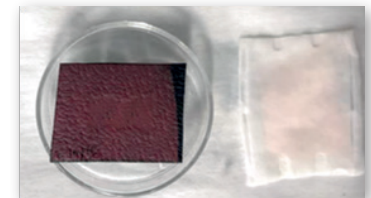
Diisostearyl malate



Emfinity® CGSA 600 B



Emfinity® PTIS

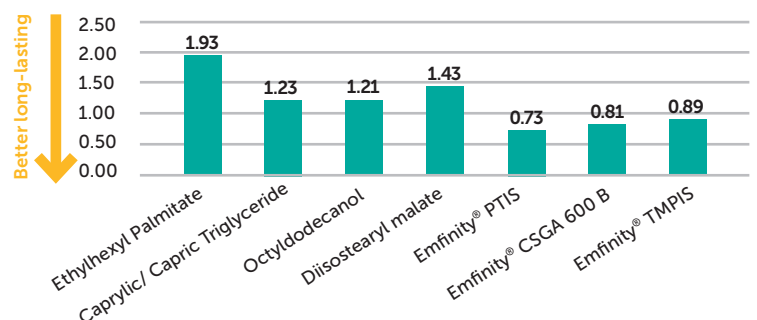


Emfinity® TMPIS

Emfinity® CGSA 600 B has **better color transfer rate** than control and most of benchmark and **comparable transfer rate** to Emfinity® PTIS and Emfinity® TMPIS.

* Ethylhexyl Palmitate

ΔE change by NaCl water immersion





Emfinity® TMPIS

INCI: TRIMETHYLOLPROPANE TRIISOSTEARATE

A versatile emollient that offers **soft glide**, targeted primarily for lip and long-wear, waterproof makeup.

Delivers **soft, smooth spreadability with longer playtime**.

Offers an occlusive **flexible film** that helps **reinforce the skin's natural barrier** while providing **moisturization** without heavy or greasy skin feel.

Ensures good dispersing properties for color pigments and acts as a binder.

- Non-migrating
- Reduces TEWL
- Non-tacky
- Skin conditioning
- Enhances gloss

APPLICATION

Colour cosmetics, skin care

Lipstick, lip gloss/balm, liquid blush, liquid bronzer, powder fixer, highlighter, primer, foundation, hand/lip cream

PARAMETERS	VALUES/CHARACTERISTICS
Appearance	Yellowish liquid
Spreadability	Low



BRB International B.V.

PO Box 3552
NL-6017 ZH Thorn
Office: Europastraat 5
NL-6014 CD Ittervoort
The Netherlands

P +31 475 560 300
info@brbbv.com
www.brb-international.com



BRB Singapore Pte Ltd.



BRB Malaysia Sdn Bhd



BRB Hong Kong Limited



BRB CEE sp. z.o.o.



Qingdao BRB Trading Co., Ltd.



BRB South Korea Co., Ltd.



BRB Dubai



BRB Silicones South Africa Pty Ltd



BRB ST Kimyasal



BRB North America, Inc.



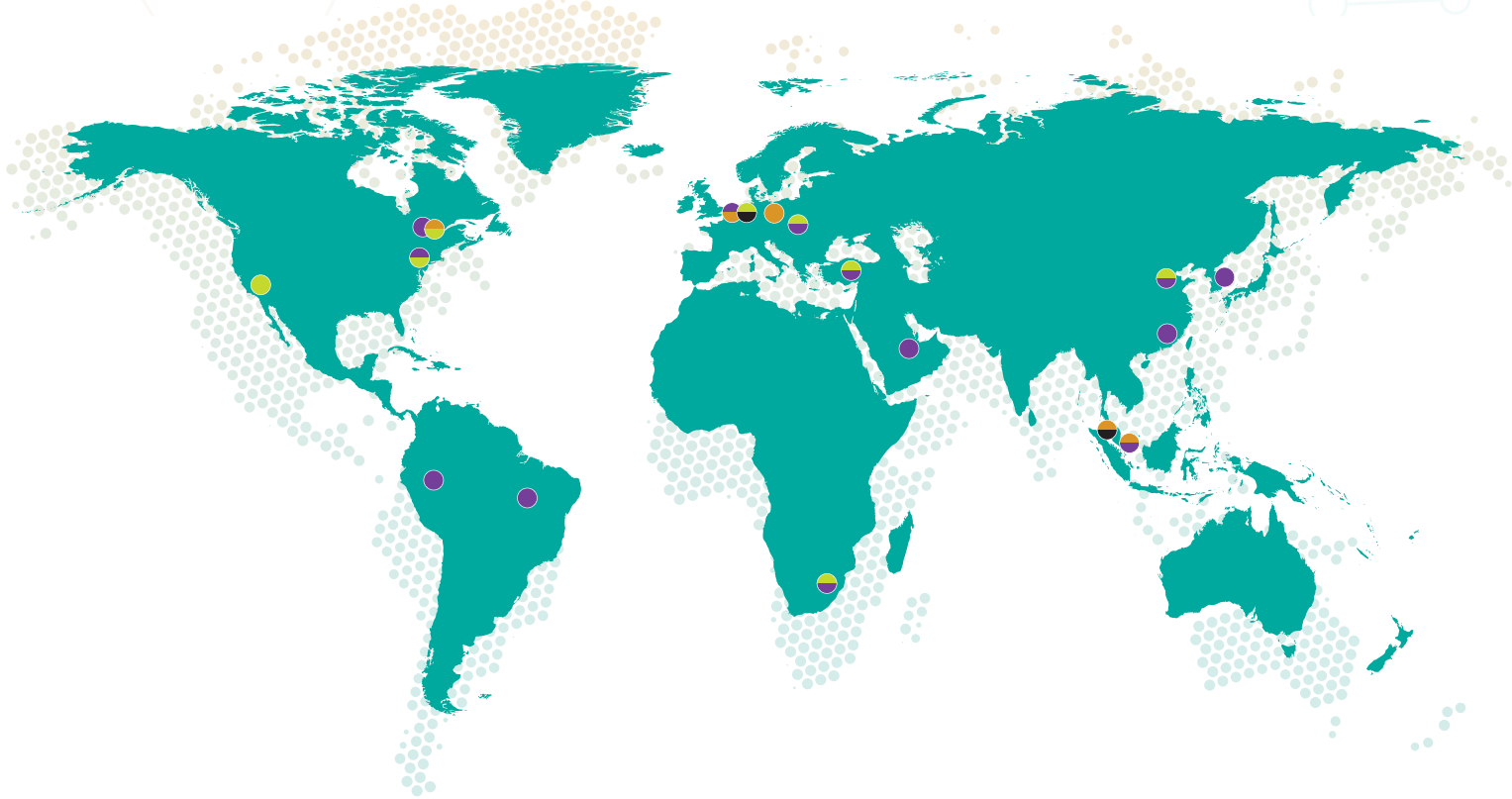
BRB South America, Inc.



CSL Silicones Inc.

Interested in our products?

Find a BRB contact or distributor in your region
via www.brb-international.com/contact



Sales office



Production



Warehouse



R&D center