

## PRO\*CRE®-SF50

**GLOSS AGENT FOR COSMETICS** 

Innovation, challenge, investigate customer-oriented

Always challenges to provide a new value to customers and society

PROFILE

INCI Name

Hydrogenated Castor Oil Dimer Dilinoleate and Caprylic/Capric Triglyceride

CAS No.

646054-62-8 and 73398-61-5

Appearance

Yellowsh viscous liquid

PROPERTY & BENEFIT



#### **PROPERTY**

- It is contain 50% natural-derived polyester
- Highly-polymerized, but liquid
- Excellent stability against heat & long-term storage



#### **BENEFITS**

- Gives excellent gloss and softens skin for skin cream and lips.
- High pigment dispersing ability, so it gives color make up products excellent affinity.
- Color doesn't change over time

APPLICATION

Skincare

gives excellent gloss and softens skin

Lips

gives excellent gloss

body soap

rich and creamy foam, skin moist and smooth

Item	Specification
Appearance (at 25°C)	Yellowish viscous liquid
Odor	Characteristic odor
Active (%)	45.0 <b>–</b> 55.0
Saponification Value (KOH mg/g)	230 – 280
lodine Value	30 - 50
Acid Value (KOH mg/g)	5.0 Max
Viscosity ( Brookfield RVT at 25°C, cps )	5,000 – 10,000

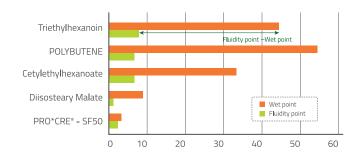




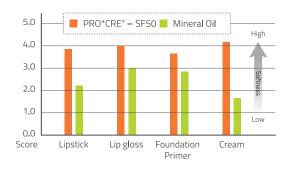
# PRO\*CRE®-SF50 GLOSS AGENT FOR COSMETICS

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#### **O** ADDITIVE AMOUNT OF ETHYLHEXYL PALMITATE



#### **©** EFFECT TO SOFTEN SKIN WITH EVERY FORMULATION

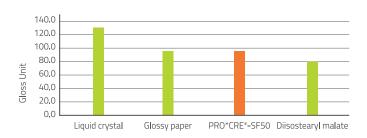


[Procedure]

Each formulation was applied to the forearm of healthy human adult and evaluated texture.

The more score reaches 5 point, the softer skin becomes thanks to each sample application

#### MEASUREMENT OF GLOSS



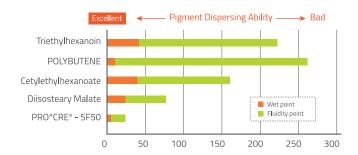






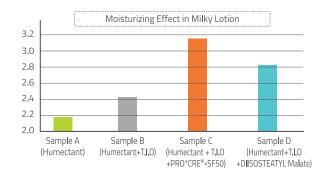


#### • PIGMENT DISPERSING ABILITY (TITANIUM DIOXIDE)



#### SUPERIOR IN MOISTURIZING EFFECT

SYNERGY WITH HUMECTANT



[Evaluation Method]

Apply each sample on the skin for 5 hours. And then remove them.

After 30min, measure moisture level of horny layer with SKICON. (Initial value =1)

#### MAKE GOOD WATERPROOF FILM ADHESION.

(FILM FORMING)

	①Contact Angle (before rinse off)	②Contact Angle (after rinse off)	Difference (1)–2)
PRO*CRE®-SF50	52.2	47.9	4.3
Lanolin oil	58.1	25.6	32.5
Castor oil	95.1	21.7	73.4
DIISOSTEARYL MALATE	71.4	24.0	47.4









Finally, PRO\*CRE®-SF50 have long lasting effect.





# PRO\*CRE®-SF40S

Silicone free hair conditioner

Innovation, challenge, investigate customer-oriented

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#### PROFILE

INCI Name

Hydrogenated Castor Oil Dimer Dilinoleate
and PEG-40 Hydrogenated Castor Oil

CAS No. 646054-62-8 and 61788-85-0

Appearance Yellowsh viscous liquid

#### BENEFIT

- Multi-Cultural Conditioner for Damaged Hair
- Enables conditioning on wide range of ethnic hair types
- Promotes hair health
- Delivers consumer perceivable benefits
- Increases shine on damaged ethnic hair

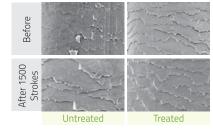
#### APPLICATION

- Silicone free conditioner of hair care
- · Provides moistness and smoothness like silicones
- Easy in application
- Use in 0.2 1.0 wt% of total amount

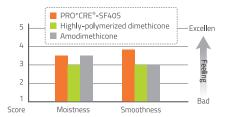
#### TREATED WITH 0.5% PRO\*CRE®-SF40S CONTAINNIG CONDITIONER

Hair cuticle abrasion study

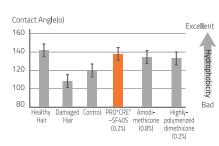
of treated and untreated hair tresses before and after 1500 combing strokes by SEM photo



SENSORY
EVALUATION
(MOISTNESS &
SMOOTHNESS)



THE CONTACT
ANGLE ON
HAIR



#### SPECIFICATION

Item	Specification
Appearance (at 25℃)	Yellowish viscous liquid
Odor	Characteristic odor
Moisture content	Max. 0.5%
Saponification Value	70 – 90
Iodine Value	10 - 30
Acid Value	5.0 Max
Viscosity	5,000 – 10,000

#### PROPERTY

- Plant derived polyester
- Match up with natural cosmetics and the best choice for silicone free hair conditioner
- Extremely stable against oxidation
- Excellent stability against heat & long-term storage

#### APPLICATION TIP

- Avoid direct contact UV light
- Store at cool dry place
- Avoid high temperature
- **COMPARED WITH SILICONE** (FOR HAIR CARE)



PRO\*CRE®-SF40S

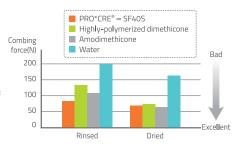
$$\mathsf{Ho} \underbrace{\hspace{1cm} \mathsf{R} \hspace{1cm} \mathsf{O} \hspace{1cm} \mathsf{R} \hspace{1cm} \mathsf{O}}_{\mathsf{R}} \underbrace{\hspace{1cm} \mathsf{O} \hspace{1cm} \mathsf{R} \hspace{1cm} \mathsf{O}}_{\mathsf{R}} \mathsf{OH}$$



- Provide Moistness, Smoothness like silicones
- Natural plant derived, but doesn't cause build-up on hair
- Provide the same effect as general highly-polymerized silicone, when it adds the small amount of products
- Color doesn't change over time
- Reduction of combing force (compared with silicone)

### REDUCTION OF COMBING FORCE

Measurement of the combing character of hair tresses







### PRO\*CRE®-GDP200 & GSC1000

Premium Opaque Skin Essence

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#### PRO\*CRE®-GDP200 PROFILE

INCI Name Glycerin, Glyceryl trioctanoate, Diphenyldimethicone, Polyglyceryl-10 Myristate

56-81-5/7360-38-5/352230-22-9/ 87390-32-7

Viscous liquid Appearance

#### **SPECIFICATION**

PRO*CRE®-GDP200	Specification
Appearance (at 25°C)	Viscous liquid
Odor	Characteristic odor
pH (5%, aqua solution)	5.5 – 7.5
Moisture Content (%)	12.0 – 16.0
Specific Gravity (g/cm³)	1.03 – 1.09
Solubility	Easily spreadability of water phase

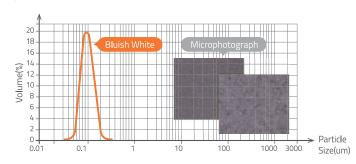
#### PROPERTY

- PRO\*CRE®-GDP200 gives a light feeling and emollient effect by forming a thin oil film on the skin
- Application of D Phase emulsification method : We can easily prepare small and fine particle size products containing high oil contents (50.0 wt% min)
- Easy in application : many cosmetic preparations can be formulated by simply addition of water phase
- Has a good spreadability

#### APPLICATION

- Emollient of Skincare, Haircare, and almost water phase cosmetic products
- Easy in application
- Time & energy saving
- Use in 5–10 wt% of total amount

#### DIAGRAM D-PHASE EMULSION



#### PRO\*CRE®-GSC1000 PROFILE Silicone free

INCI Name

Glycerin, Helianthus Annuus Seed Oil, Glyceryl trioctanoate, Polyglyceryl-10 Myristate

56-81-5/8001-21-6/7360-38-5/ 87390-32-7

Appearance

Viscous liquid

#### SPECIFICATION

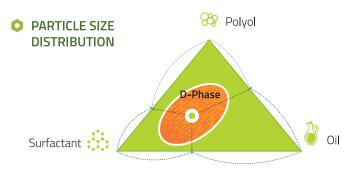
PRO*CRE®-GSC1000	Specification
Appearance (at 25°C)	Viscous liquid
Odor	Characteristic odor
pH (5%, aqua solution)	5.5 – 7.5
Moisture Content (%)	12.0 – 16.0
Specific Gravity (g/cm³)	0.97 – 1.03
Solubility	Easily spreadability of water phase

#### BENEFIT

- Easy in application: many cosmetic preparations can be formulated by simply addition of water phase
- Highly skin compatible
- Pleasant skin feel
- Fresh sensation
- Ouick dilution: from a concentrate
- Stability during impregnation

#### APPLICATION TIP

- Avoid direct contact with ethanol and high concentration electrolyte solutions
- Add into formulation at temperature not higher than 50 degree Celsius
- Store at cool dry place
- Avoid high temperature







# PRO\*CRE®-LAP100

Highly lubricant of hair care



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PROFILE

INCI Name

PPG-12-PEG-50 LANOLIN

CAS No.

68458-88-8

Chemical name

Polyoxypropylene Polyoxyethylene lanolin ether

FUNCTION



PRO\*CRE®-LAP100 acts as a emollient, emulsifier, softener and conditioner of hair care



Obtained by reacting lanolin(extraction of sheepskin) with ethylene oxide & propylene oxide



Excellent waterproof effect (because lanolin consist of sterol esters)



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Highly lubricant of hair care (because PPG-12-PEG-50 with high molecular weight & lubrication)

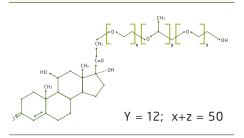


SPCIFICATION

Item	Specification	Test Method
Appearance (at 25℃)	Brown, low viscous liquid	at 25℃
рН	5.0 – 7.0	pH meter (25℃, 5% aq. Soln.)
Active (%)	98.0 Min	Kett (130℃, 30min)
Hydroxyl Value (KOH mg/g)	10 – 20	Electro potentiometry
Moisture content(%)	2.0 Max	Karl-fisher
Acid Value (KOH mg/g)	5.0 Max	Electro potentiometry
Cloud Point (°C)	66 – 72	1% aq. Soln.
Solubility	Easily soluble in warm water and ethanol	

- APPLICATION
- Used in hair sprays, after-shave products, antiperspirants, deodorants and suntan products.
- Used as absorption bases for creams, lotions, liquid make-up and general purpose cosmetics...
- ADVANTAGE
- Compatible with anionic, nonionic, and cationic surfactants
- Forms gloossy and tack-free films
- Easily soluble in water and alcohol
- DOSAGE
- It is used 1 5 wt% of total amount.

#### Chemical Structure







# PRO\*CRE®-GS165 & PRO\*CRE®-SS

**Emulsifier & Emollient of Cosmetics** 

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#### PRO\*CRE®-GS165 PROFILE

INCI Name

Glyceryl stearate and PEG-100 stearate

CAS No.

31566-31-1, 9004-99-3

Chemical name

Glycerol monostearate

#### PROPERTIES

Item	Specification
Appearance (at 25℃)	White flake
Active Content (%)	Min 99.5
HLB	11.0
Melting Point (°C)	50 - 65
Solubility	Easily soluble in hot water

#### FUNCTION

• Emulsifier or thickeners in cosmetic

#### APPLICATION

- Emulsifier or thickeners of lotion, cream, essence, cleansing product
- Household products
- Pharmaceuticals
- Used 1 to 10 wt% based on total active content

#### PRO\*CRE®-SS PROFILE

INCI Name

Stearyl stearate

CAS No.

2778-96-3

Chemical name

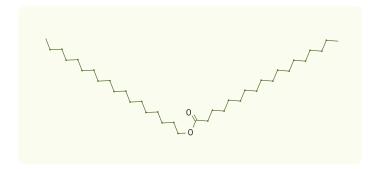
Octadecyl stearate

#### PROPERTIES

Item	Specification
Appearance (at 25°C)	White flake
Color (APHA)	50 Max
Saponification Value (KOH mg/g)	90 – 110
Hydroxyl Value (KOH mg/g)	10 Max
Acid Value (KOH mg/g)	1 Max
Melting point (℃)	55 – 61
Solubility	Insoluble in water

#### FUNCTION

- PRO\*CRE®-SS can be used to modify a product to improve feel and softness.
- · Acts as an emollient, dispersant, and opacifier



#### APPLICATION

- Used in skincare anti-aging, anti-acne, treatment, moisturizer, protection, sun care, and color sticks
- Used in creams, lotions, fatty make ups and sticks
- Used as raw material of surfactants and base materials for perfumery
- Used 1 10 wt% of total amount





# PRO\*CRE®-OD16 & PRO\*CRE®-EPO176

Humectant, skin improvement of skin care



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#### PRO\*CRE®-OD16

"PRO\*CRE®-OD16" can be used as an emulsifying agent and solubilizing agent in cosmetics.

#### PROFILE

INCI Name

Octyldodeceth-16

#### PHYSICAL PROPERTIES

Item	Specification
Appearance	Soft Wax
Active Content(%)	100
lonic	Non-ionic
pH (5wt%)	5.5 – 7.5
Hydroxyl Value	55 - 60

#### BENEFITS

 PRO\*CRE®-OD16 has characteristic that the melting point is lower than straight chain type products because of iso-branch in the alkyl group.

#### APPLICATION

• It is appropriate for the production of creams and milky lotions

#### PACKING

• 100Kgs PE Drum



#### PRO\*CRE®-EPO176

#### PROFILE

INCI Name PEG/PPG-17/6 COPOLYMER

CAS No. 9003-11-6

Chemical name Polyoxyethylene Polyoxypropylene

Copolymer

#### PROPERTIES

Specification
Clear liquid
Characteristic odor
100 Max
97 – 115
5.0 – 7.5
0.5 Max
210 – 260

#### FUNCTION



#### APPLICATION

- Humectant, skin improvement of skin care
- Used of 1.0 5.0% total amount





### PRO\*CRE®-SP60 & PRO\*CRE®-SP83



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#### PRO\*CRE®-SP60

"PRO\*CRE®-SP60" is a W/O type emulsifier, it can co widely used in the cosmetics field, food industries and textile industries.

PROFILE

INCI Name

Sorbitan monostearate

#### PROPERTIES

Item	Specification
Appearance (at 25℃)	Faint yellow flake
Color (Gardner)	2 Max
Saponification Value (KOH mg/g)	140 – 160
Hydroxyl Value (KOH mg/g)	240 – 270
Acid Value (KOH mg/g)	10.0 Max
HLB	4.7

#### PRO\*CRE®-SP83

"PRO\*CRE®-SP83" is a W/O type emulsifier, it can co widely used in the cosmetics field, general industries and textile industries.

PROFILE

INCI Name

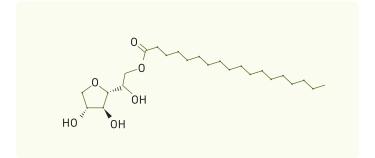
Sorbitan sesquioleate

#### PROPERTIES

FUNCTION

	)
Item	Specification
Appearance (at 25°C)	Faint yellow flake
Color (Gardner)	7 Max
Saponification Value (KOH mg/g)	170 – 180
Acid Value (KOH mg/g)	10.0 Max
HI B	3.7
1120	3.7

#### FUNCTION



- W/O emulsifier of cream & lotion
- Corrosion inhibitor

APPLICATION

- Slip agent
- Oil solubilizing agent

#### APPLICATION

- W/O emulsifier of cream & lotion
- Figment dispersant
- Dye solubilizer
- Food emulsifier





### Methyl Gluceth Derivatives

High Moisturizer & Lubricant of Cosmetics



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MECHANISMS

Glucose	Methyl Glucoside	Methyl Gluceth
CHO H—OH HO—H Methylation H—OH CH2OH		H(OCHzCHz)wO H(OCHzCHz)xO O H(OCHzCHz)yO OMe  +z=10mol (INCI Name:Methyl Gluceth-10) +z=20mol (INCI Name:Methyl Gluceth-20)

- FUNCTION
- Alkoxylate of  $\alpha$  -Methyl Glucoside
- Humectant
- Reduces tacky feel of formulations
- Moisturizer
- Very effective freezing point depressant
- Smooth, silky feel
- Not irritation
- Improves foam properties
- Glossing aid

- APPLICATION
- Dry Skin Beauty Lotions
- Shampoos
- Shaving Creams

- Shower Gels
- Eye Gels
- Facial Cleansers

Item	PRO*CRE®-MG10 (Methyl Gluceth-10)	PRO*CRE®-MG20 (Methyl Gluceth-20)	PRO*CRE®-P10MG (PPG-10 Methyl Glucose Ether)
Appearance (at 25℃)	Clear-pale Yellowish, viscose liquid		
pH (10%, aq. Soln. at 25°C)	5.5 – 8.0	5.5 – 8.0	5.5 – 8.0
Moisture (%)	1.0 Max	1.0 Max	1.0 Max
Hydroxyl Value (KOH mg/g)	350 – 370	205 – 225	285 – 305
Acid Value (KOH mg/g)	1.5 Max	1.0 Max	1.0 Max
Solubility	Free soluble in water		





# Methyl Gluceth Derivatives PRO\*CRE®-MGDOE127

Thickener from Vegetable origin

**Innovation, challenge, investigate customer-oriented**Always challenges to provide a new value to customers and society

#### PRO\*CRE®-MGDOE127 PROFILE

INCI Name
PEG-120 Methyl Glucose Dioleate

CAS No.
86893-16-8

Appearance
Syrup, Pale yellow, viscose liquid

#### PROPERTY

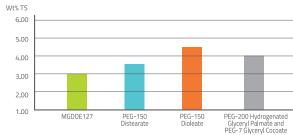
- The diester of methyl glucose and oleic acid with an average of 120 moles of ethylene oxide
- It is 70% solids, and is supplied as a high viscosity liquid
- Highly efficient thickening enhancer that works synergistically with surfactants to build viscosity
- Reduces irritation associated with surfactants
- · Enhanced thickening with mild amphoteric surfactant
- Exceptional sensory attributes
- Excellent clarity and Very light feel

#### SPECIFICATION

Item	Specification
Appearance (at 25℃)	Syrup, Pale yellow, viscose liquid
Odor	Mild, Characteristic
pH (10%, aq. Soln. at 25°C)	4.5 – 7.5
Moisture (%)	29.0 – 31.0
Saponification Value (KOH mg/g)	9 - 20
lodine Value (KOH mg/g)	3 - 11

#### THICKENING EFFICIENCY

• Total Solids Required to Viscosity = 6,000-8,000mPa·s



#### Thickener

Formulation: 7.0wt% TS SLES(2), 5.6wt% TS SLS, 3.5wt% TS CAPV, pH 5.5-6.0, No additional salt

PRO\*CRE®-MGDOE127 thickener offers efficiency in SLES/SLS/CAPB based surfactant systems.

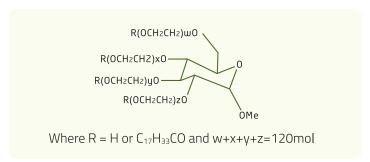
#### BENEFIT

- Reduces irritancy of surfactant system
  - Exceptionally mild and non-irritating to eyes and skin
  - Very light, pleasant skin feel
- Highly efficient nonionic associative thickener
  - Surfactant compatibility; enhanced thickening with mild amphoteric
  - Synergistic thickening with salt
  - Excellent foam generation
- Typical use level 0.5~4.0%

#### APPLICATION

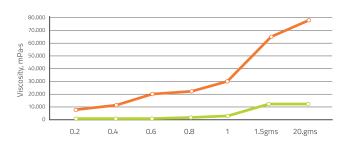
- Baby shampoos
- Liquid hand soaps
- Shampoos (High Viscosity)
- Shampoo gels

#### MECHANISMS



#### THICKENING SYNERGY WITH SALT

 11.2wt% TS SLES-2, 2.3wt% TS CAPB, pH 5.5-6.0 / 2.5wt% TS MGDOE127 Thickener vs.NaCl



PRO\*CRE®-MGDOE127 thickener has excellent thickening synergy with salt.





# PRO\*CRE®-G26

Moisturizer & Lubricant

**Innovation, challenge, investigate customer-oriented**Always challenges to provide a new value to customers and society

#### PROFILE

INCI Name
Glycereth-26

CAS No.
31694-55-0

Appearance
Colorless and transparent liquid

#### ADVANTAGE

- · Compatible with anionic, nonionic, and cationic surfactants
- Stable over a broad pH range(3-11)
- Has a smooth, non-greasy, and luxurious feel
- Controls the moisture exchange between the products

#### APPLICATION

- Used in creams, lotions. antiperspirants, beauty masks, depilatories, and hair care products.
- Acts as a humectant, lubricant, dispersant, plasticizer and foam modifier.
- Possesses moisturizing properties.

#### PROPERTIES

ltem	Specification
Appearance (at 25°C)	Colorless and transparent liquid
рН	5.0-7.0
Color(APHA)	40 Max
Hydroxyl Value	128-138



#### STRUCTURE

#### PROCESS

	ESHIN Process	Others Process
	One Step	Two Step
Precess	Short reaction time (energy & time saving)	Long reaction time
	Catalyst removal (filter press)	Acid Neutralization (not filtered)
	Narrow range ethoxylate	Broad range ethoxylate
	Low contents alkali metal (K, Na) : 10 ppm max	High contents alkali metal(K, Na) : 300 ppm min
Properties	Excellent transparency	Poor transparency
	Not irritant	Low irritant
	Long-term storage stability	Short-term stroage stability







Always challenges to provide a new value to customers and society

**Emulsifier & Solubillizer of Cosmetics** 

Innovation, challenge, investigate customer-oriented

PROFILE

INCI Name

PEG-40 Hydrogenated Castor Oil & PEG-60 Hydrogenated Castor Oil

CAS No.

61788-85-0

Appearance

Paint yellow paste/solid

FUNCTION



Nonionic solubilizer and emulsifier for the cosmetic and aroma products



Vegetable-based solubilizer obtained by reacting hydrogenated castor oil with ethylene oxide

Item	PRO*CRE®-BRH 40S PRO*CRE®-BRH 60S		
INCI NAME	PEG-40 Hydrogenated Castor Oil	PEG-60 Hydrogenate Castor Oil	
Appearance (at 25°C)	Paint yellow paste	Paint yellow solid	
pH(25℃ , 5% aq. Soln.)	5.0 – 7.0	5.0 – 7.0	
Active (%)	99.5 min	99.5 min	
Hydroxyl Value (KOH mg/g)	60 – 80	50 – 70	
Melting Point (℃)	Paste(at 30℃)	38 – 43	
Molecular weight (g/mol)	Approx. 2500	Approx. 3300	
HLB	14 – 16 15 – 17		
Solubility	Easily soluble in warm water and ethanol		
Application	Used to solubilizer essential oils, perfume compositions, vitamins and hydrophobic active substances in aqueous-alcoholic and purely aqueous solutions		

- ADVANTAGE
- Compatible with anionic, nonionic, and cationic surfactants
- Free soluble warm water, ethanol and isopropanol, and in essential oils and other hydrophobic compounds.
- Stable over a broad temperature range for final products  $(-5 50^{\circ}\text{C})$  little tendency to foaming
- APPLICATION
- Used emulsifiers and solubilizing agent for essential oils, fragrance oils, vitamins and hydrophobic active substances in aqueous-alcoholic and purely aqueous solutions.
- It is used 1.5 to 2.5 times based on oil content.
- Designed for use as an emulsifier in aqueous formulations containing a large water phase.





# PRO\*CRE®gel series

Powerful Moisturizet & Lubricant

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66

#### PRO\*CRE®gel series

POWERFUL MOISTURIZER & LUBRICANT WITH EXCELLENT SENSORY FEELING AND RHEOLOGICAL MODIFIER

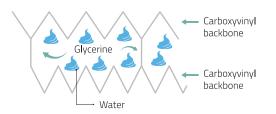
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#### PROPERTY & BENEFIT

- Colorless clear gel for elegant products
- Weak acid: pH 5 6, favorable for skin (pH of Normal skin: 5.2~5.8)
- Water-soluble: non-oily emollient and cold processing production
- Build the wide range of viscosity
- Hydration: excellent moisturizers from highly polymerized structure
- · Excellent lubricant: good sensory feeling
- Highly stable structure: make more stable products

#### MECHANISMS | Unique chemical structure

Moisturizing and lubricative effect when highly polymerized structure release water





#### **HOW TO RELEASE WATER?**

Destruction of structure by

Addition of Ionic materials

Addition of Acids or alkali

Salt content or change of pH on the skin Generally, the salt content at the skin Surface gradually disintegrate this highly polymerized compound holding water.

The compound release water, and then make moisturizing effect.

Trade name	PRO*CRE®gel CG	PRO*CRE®gel MS	PRO*CRE®gel DV	PRO*CRE®gel OIL	
INCI NAME	Glycerin and Glyceryl Acrylate/ Acrylic Acid Copolymer	Glycerin and Glyceryl Acrylate/ Acrylic Acid Copolymer	Glycerin and Glyceryl Acrylate/ Acrylic Acid Copolymer	Glycerin and Glyceryl Acrylate /Acrylic Acid Copolymer and PVM/MA Copolymer	
		Solvents & preservatives			
	Glycerin & 1,2-Hexanediol				
Appearance	Clear, colorless, Viscous gel	Clear, colorless, viscous gel	Clear, colorless, Low viscous liquid	Clear, colorless, Low viscous liquid	
рН	5.0 – 6.0	5.0 – 6.0	5.0 – 6.0	5.0 – 6.0	
Refractive Index	1.415 - 1.435	1.380 - 1.400	1.380 - 1.400	1.380 - 1.400	
Viscosity	250,000 - 350,000	250,000 - 350,000	900,000 – 1,200,000	500 - 1,500	
Unique advantages of grade	General grade	The loss of viscosity in aqua solution is less than CG because of different holding capacity of water	The highest viscosity High yield value → Good for emulsion stabilization and suspension of TiO2, un-ionized pigments, micas, etc.	Similar feel to silicon oils	
Application	<ul><li>Facial moisturizers</li><li>Skin toners</li><li>Cleansing gels</li></ul>	- Sun screen creams - Body lotions & creams - Eye round gels	- Makeup Removers - Skin lotions & creams - Massage Creams		





# PRO\*CRE®gel series

Powerful Moisturizet & Lubricant



Innovation, challenge, investigate customer-oriented

Always challenges to provide a new value to customers and society





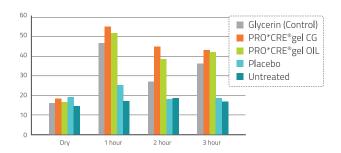
The sensory of the formula is similar to the benchmark with an lowered stickiness immediately upon application



- APPLICATION
- Recommended concentration: 5~30%
- Applicable product: Facial moisturizers, Mask sheet, creams, body lotions, etc.

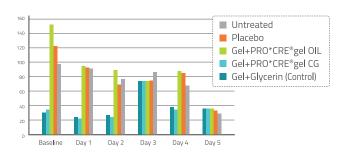
#### MOISTURIZING TEST \_

• Short-term Moisturization (3 hours)



There was a significant increase in moisturization between PRO\*CRE\*gels compared with both the placebo and no treatment

Moisturization Clinical Data Long-term (8 days)



PRO\*CRE®gel provide a significant increase in moisturization during treatment and after regression compared to the placebo and no treatment



Concentrations: 5-50% depending on the degree of moisture balancing, rheological considerations and aesthetics desired in the product. Added at post-emulsion formation in creams and lotions. It is often added before the cool-down of hot emulsions.

It may also be used to stabilize cold manufactured emulsions.



Especially suitable for use in creams, lotions, makeups and other personal care and cosmetic products.

Concentrations:
10 - 20 % for Moisturization
10 - 50 % for rheological modification.



General dosage is 7-50% in cream & lotion. It's dosage depends on the degree of moisture balancing, rheological considerations and aesthetics desired in the product.



Concentrations: 3% - 5% in hand lotions for a superior after-feel as well as excellent spreading and a superb feel upon application.

PRO\*CRE\*gel OIL can be used

PRO\*CRE®gel OIL can be used to substitute for silicone oils.





### PRO\*CRE®FM-GGL

Skin Conditioning and Maintain Skin Moisture

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PROFILE

INCI Name

Glyceryl Glucoside, Glycerol

CAS No.

22160-26-5 and 56-81-5

Appearance

Slight yellowish liquid

BENEFIT



Keep the skin moisturized (promote creation of Aquaporin, Activate the moisture channel)





Reactivation of aging cells





Cell regeneration, Wound healing





Gives skin elasticity and smoothness





Antioxidant function

- APPLICATIONS
- Maintain skin moisture ( Activated Aquaporin and Moisture channel )
- Re-activate aged cells
- Recover impaired cells
- · Give skin vitalization and softness
- SPECIFICATION

Properties	Analysis Result
Appearance	Slight yellowish liquid
Color(APHA)	60
Active Matter(%)	86.2
Water(%)	13.8
PH(2% sol.)	5.64





# PRO\*CRE®-2080

Antimicrobial Agent for Humectants, Skin conditioning agent and Hair conditioning agent.



Innovation, challenge, investigate customer-oriented

Always challenges to provide a new value to customers and society

PROFILE

INCI Name

1,2 - Octanediol

CAS No.

1117-86-8

Appearance

Colorless liquid(30℃)

PRODUCT FEATURES



**PRO\*CRE®-2080** is antimicrobial agent for humectants, skin conditioning agent and hair conditioning agent.





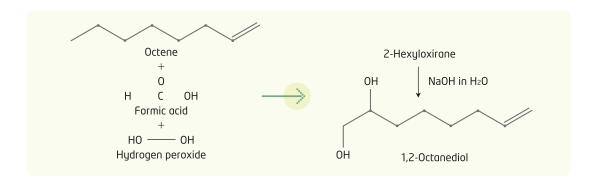
It is good antimicrobial effectiveness with low toxicity.





It is good for viscosity control, hydrating and wetting

CHEMICAL STRUCTURE



TYPICAL
 PROPERTIES

Properties	PRO*CRE-2080 Caprylyl Glycol (1,2-Octanediol)
Appearance	Solid Wax, Liquid (30℃)
Color (APHA)	30 Max
Odor	Characteristic
O.H Value Gravity	740 - 770
Purity (%)	98.0 Min

- Shelf Life : 365 days
- These items are provided for general information only. They are approximate values and are not considered part of a product specification.

