



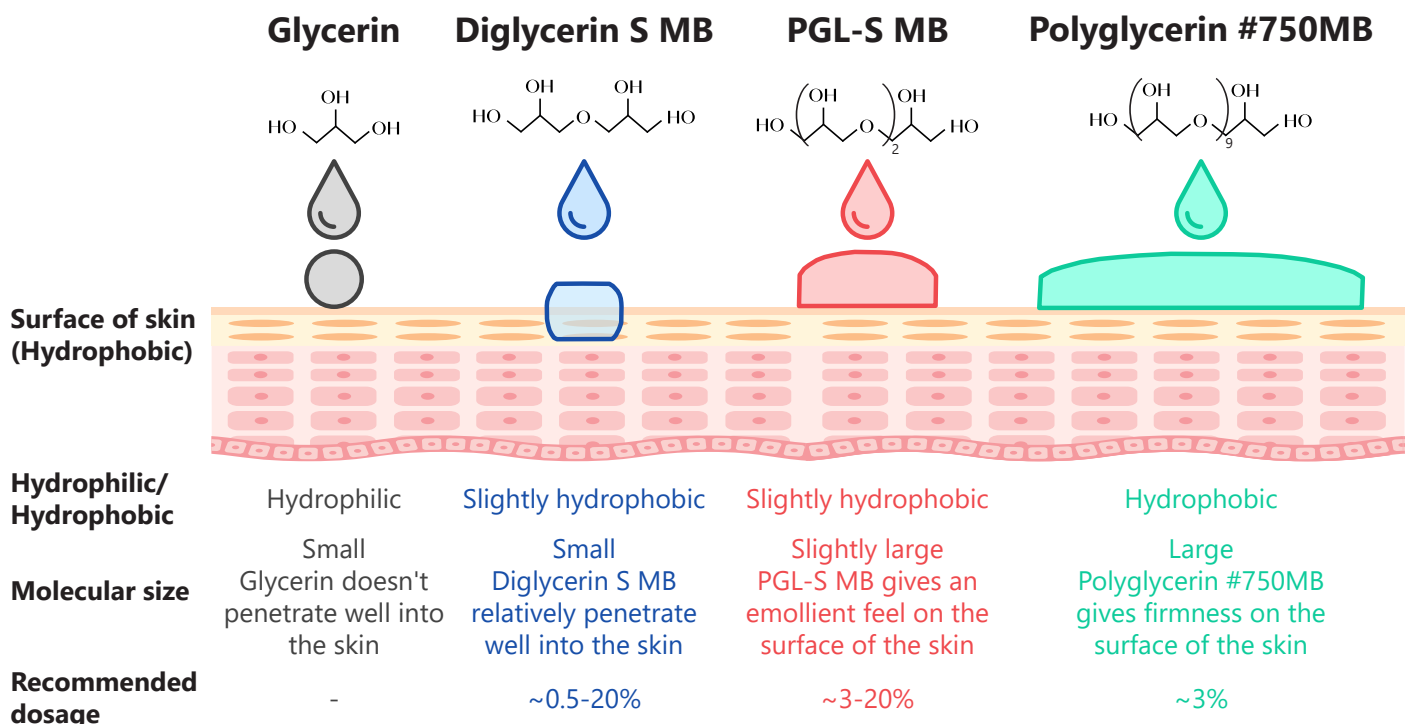
# Technology of polyglycerins 2/4

## L-1 Basic Formulation for Moisturizing Lotion

Polyglycerins impart a variety of textures depending on their degree of polymerization.

	INCI Name	Product name	wt-%	
Moisturizer Texture modifier	<b>DIGLYCERIN</b>	<b>DIGLYCERIN S MB</b>	<b>0.50</b>	Improving skin affinity and softness of skin
Moisturizer Texture modifier	<b>POLYGLYCERIN-3</b>	<b>PGL-S MB</b>	<b>7.00</b>	Improving smoothness, thickness and emollient feel
Moisturizer Texture modifier	<b>POLYGLYCERIN-10, WATER</b>	<b>POLYGLYCERIN #750MB</b>	<b>3.00</b>	Imparting skin firmness
Moisturizer	GLYCERIN	Cosmetic Grade Concentrated Glycerin	<b>10.00</b>	
	BUTYLENE GLYCOL		5.00	
	WATER		up to 100	

## Degree of polymerization vs effect on texture





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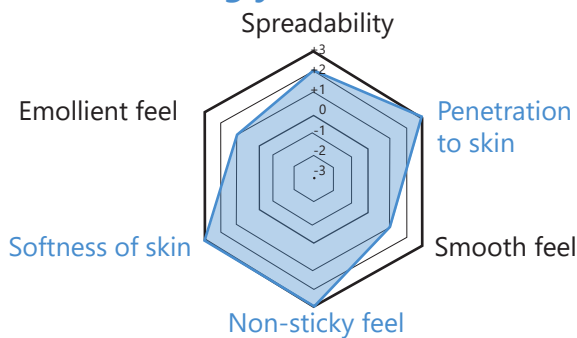
## G-1 Moisturizing Gel

By selecting the type of polyglycerin, various feels in use such as "fluffy" or "smooth" can be adjusted.

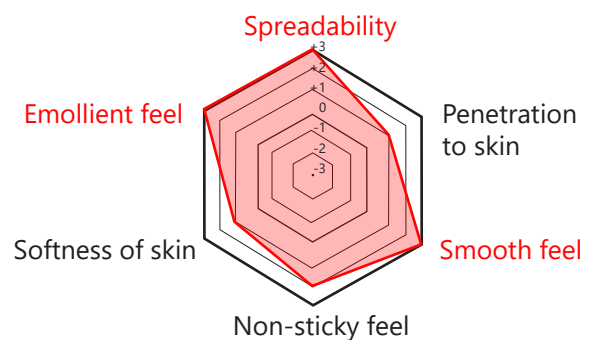
PHASE	INCI Name	Product name	wt-%	
A	<b>DIGLYCERIN or POLYGLYCERIN-3</b>	<b>DIGLYCERIN S MB or PGL-S MB</b>	<b>7.00</b>	Gives softness Gives emollient feel
	GLYCERIN		<b>10.00</b>	
	BUTYLENE GLYCOL		5.00	
	CARBOMER / EMULSIFYING POLYMER / NEUTRALIZER		0.75	
	WATER		up to 100	
B	<b>POLYGLYCERYL-10 MYRISTATE</b>	<b>S FACE M-1001 MB</b>	<b>0.50</b>	
	<b>MACADAMIA SEED OIL POLYGLYCERY-6 ESTERS BEHENATE</b>	<b>S FACE VL-211 MB</b>	<b>2.00</b>	
	SQUALANE		3.00	
C	PRESERVATIVE		QS	

## Features of feel in use (Moisturizing Gel)

### Diglycerin S MB



### PGL-S MB



## In a few words

**Diglycerin S MB : for skin penetration / non-sticky feel / skin softness**

**PGL-S MB : for spreadability / smooth feel / emollient feel**

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## G-4 Moisture serum

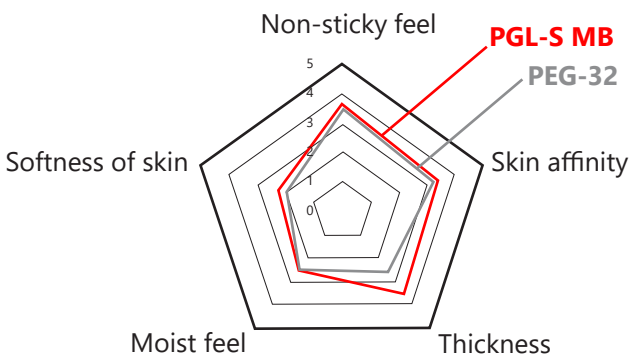
Non-sticky and rich moisture serum formulated with PGL-S giving high moisture retention and emollient feel in use.

	INCI Name	Product name	wt-%	
<b>Feel modifier</b>	<b>POLYGLYCERIN-3</b>	<b>PGL-S MB</b>	<b>15.00</b>	Gives emollient feel
<b>Moisturizer</b>	<b>GLYCERIN</b>	<b>Cosmetic Grade Concentrated Glycerin</b>	<b>2.00</b>	
	DIPROPYLENE GLYCOL		5.00	
	THICKENER		0.40	
<b>Emulsifier</b>	<b>POLYGLYCERYL-10 ISOSTEARATE</b>	<b>S FACE IS-1001P MB</b>	<b>0.50</b>	
	OIL		1.50	
	10%-POTASSIUM HYDROXIDE		0.14	
	WATER		up to 100	

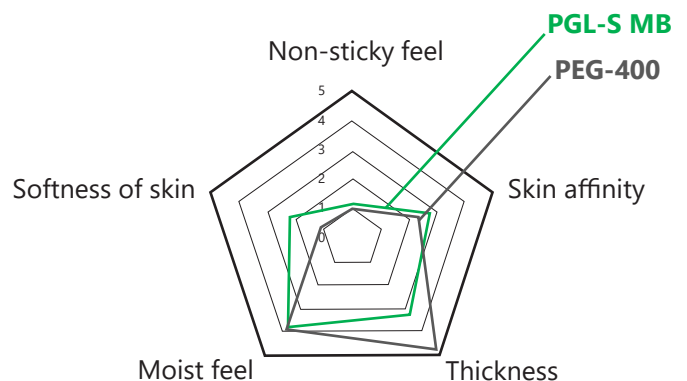
## Comparison of effect on texture with PEG

Evaluated formulation: 10% aqueous solution

### PGL-S MB vs PEG-32



### #750MB vs PEG-400



## In a few words

**Polyglycerins can be used as texture and feel modifiers instead of PEG.**