



SPEC CHEM IND.

PrzvFree™ CLG

Caprylyl Glycol



www.specchemind.com



↑ Product Name:	PrzvFree™ CLG
↑ Product Name:	SC-9591
↑ INCI Name:	Caprylyl Glycol
↑ CAS No.:	1117-86-8
↑ EC No. :	214-254-7
↑ Molecular Formula:	$C_8H_{18}O_2$
↑ Molecular Weight:	146.23
↑ Similar product:	Lexgard® O (Inolex)
↑ Structure:	





↑ Characteris:

- ↑ 1. Excellent broad-spectrum antibacterial effect , can be used in "zero preservative" cosmetics products , it can inhibit Gram-negative bacterium, Gram-positive bacterium, yeast and mould.
- ↑ 2. High purity liquid emollients, it can reduce skin water loss, soft and smooth skin, strength cosmetic product moisture effect.
- ↑ 3. It complies with international regulation and can be used worldwide.
- ↑ 4. Compatibility with most cosmetic ingredients and can be used in wide pH;



↑ MIC of PrzvFree™ CLG

Test Bacterial	Active matter(PPM)	PrzvFree™ CLG
Pseudomonas aeruginosa	1500	0.15
Burkholderia cepacia	1500	0.15
Staphylococcus aureus	750	0.07
Escherichia coli	1500	0.15
Aspergillus niger	400	0.04
albicans Saccharomyces	700	0.07



↑ Antibacterial of PrzvFree™ CLG and ethylhexyl glycerol

Bacteria	PrzvFree™ CLGMIC%	Ethylhexyl glycerol MIC%
↑ E. coli	0.15	0.14
↑ Pseudomonas aeruginosa	0.15	0.16
↑ Staphylococcus aureus	0.07	0.11
↑ Candida albicans	0.07	0.10
↑ Aspergillus niger	0.04	0.12

↑ From the below data,PrzvFree™ CLG antibacterial is stronger than ethylhexyl glycerol.



↑ Toxicity

↑ PrzvFree™ CLG is considered to be non-toxicity and safe in personal care product: the below data is applicable to active matter:

↑ Sensibility: Human RIPT (repeat patch test): None

↑ Skin irritation: None

↑ Eyes irritation: Irritation (100% concentration)



↑ Application description:

- ↑ **Application:** PrzvFree™ CLG can be used in different phase: emulsion phase, water phase, no-water formulate. Such as: cream, lotion, bath cream, hygienic towelette, smoothing toner, shampoo, etc. control the yeast growth in wet paper towel product.◦
- ↑ **Solubility:** 3g/l water, easily soluble in alcohol, glycol, oil and fats;
- ↑ **Recommend dosage:** 0.2—0.5%. (as synergistic agent in preservative or compound formulate). But if you would like to add it to the existing preservatives, you can use the method of testing the Microbe effect to define the dosage. PrzvFree™ CLG complex with other preservatives can show Synergy effective, and strength each other.



↑ Usage:

- ↑ Adding it in oil phase or directly adding it in Emulsifying system below 80°C , if there are other 10% polyols, the preservative system is more secure, PrzvFree™ CLG can be used in widely pH.

↑ Compatibility :

- ↑ PrzvFree™ CLG is a stable diol, thus adding to oil phase, Compatibility with most cosmetic ingredients, slightly soluble in water, easily dissolved in ethylene glycol, propylene glycol, glycerin and other polyols.

↑ Regulation:

- ↑ PrzvFree™ CLG (Caprylyl Glycol) is classified as emollient.



Physical and chemicals properties

- ↑ Appearance.....Clear and colorless liquid
- ↑ Content(%)..... ≥ 98.5
- ↑ Water content(%)..... ≤ 0.5
- ↑



- ↑ **Storage:** Keep in a well-closed, light-resistant, dry and cool place.
- ↑ **Shelf life:** 1years.
- ↑ **Package:** 25kg, Plastic drum .



↑ *Thank you*