

# CosmoSurf® PG 1-IS

**Outstanding emolliency and film formation with unique solubility**

FILM FORMING POLYMER

**SurfaTech Corporation has developed a series of products derived from polyglycerol and can be used to provide outstanding skin aesthetics, barrier properties, and film formation.**

These polymers are amphiphilic, as they possess both polar and non-polar groups bonded to the same polymer backbone. Providing outstanding emolliency and film formation on the skin, the unique solubility of these polymers also allows for them to be utilized in many formulation platforms.

As multi-domain polymers they contain groups of differing solubility and/or physical properties. The physical properties of these polymers can control film formation and aesthetics. There are two categories of the CosmoSurf® PGs: Solid and liquid versions. CosmoSurf® PG 1-IS is a wax which is based upon stearic and isostearic acid forming a waterproof film after application to the skin. The unique properties of this polymer are attributed to the polymer containing both solid and liquid domains. The solid domains allow for the film to be waxy and water resistant, while the liquid domains provide flexibility and provide easy application.

INCI:

**Polyglyceryl-3 Stearate/Isostearate/Dimer Dilinoleate Copolymer**

Key properties:

- **Naturally derived. Can be ECOCERT certified**
- **Wax solid: forms a water-resistant film on skin**

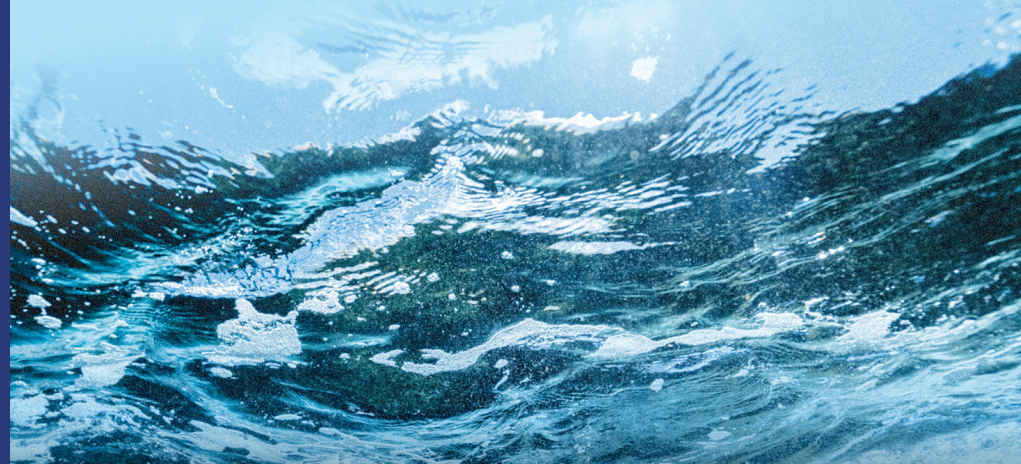
Suggested use:

**recommended for use in hair care, skin care, sun care for natural water resistance**

For more information,  
**contact us at [ctarletsky@surfatech.com](mailto:ctarletsky@surfatech.com)**  
**for ingredient supply and customized consulting**

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**770-876-6983**



# CosmoSurf® PG 1-IS

Natural water-resistant polymer for  
“plastic free” sun care product

OCEAN SAFE COMMITMENT

## Oil Sunscreen

<i>in vivo</i> SPF		
Material	A	
Avobenzene	3.0	
Octocrylene	3.0	
Homosalate	10.0	
CosmoSurf® PG 1-IS	2.0	
SurfaCare S	45.0	
CosmoSurf® CE-100	2.0	
Jojoba Oil	5.0	
Safflower Oil	25.0	

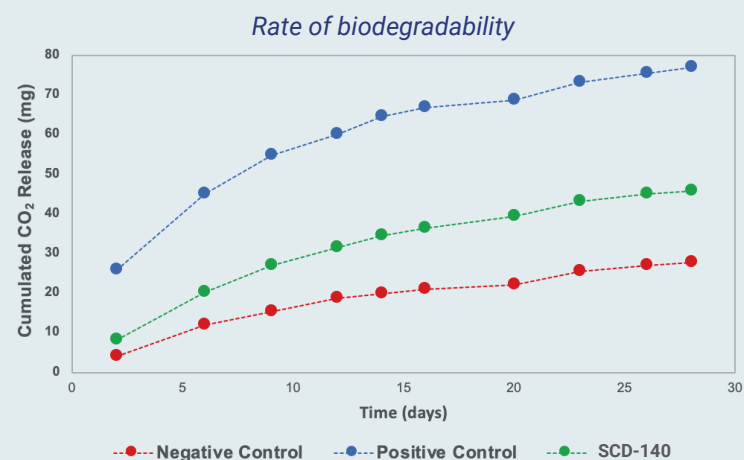
Subject	Static SPF	80 min H <sub>2</sub> O
1	45.00	39.20
2	45.00	45.00
3	34.00	34.00
SPF	41.33	39.40
Projected Label SPF	37	36

## ZnO

Material	A	
Zinc Oxide	10.0	
CosmoSurf® PG 1-IS	2.0	
SurfaCare S	45.0	
CosmoSurf® CE-100	2.0	
Jojoba Oil	5.0	
Safflower Oil	25.0	

Subject	Static SPF	80 min H <sub>2</sub> O
1	10.00	12.00
2	12.00	10.00
3	10.00	12.00
SPF	10.67	11.33
Projected Label SPF	10	10

SurfaTech is committed to creating **plastic free, environmentally safe, biodegradable ingredients** using patented molecular technology.



It is our belief that it is our responsibility to protect the environment for future generations. We accomplish this by producing green materials. We believe the path to a greener tomorrow moves away from non-green plastics (polyacrylates, polyethylene, PEG, ect.) to high-functioning polymers that are naturally derived and made from renewable resources without catalyst or solvents.

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