

# Iscaguard DGP

Paraben Free	Thiazolinone Free	Formaldehyde Free	Preservative Free	Natural
✓	✓	✓	✓	✗

INCI declaration
Pentylene glycol, caprylyl glycol, decylene glycol

Iscaguard DGP is a multi-functional ingredient for use in cosmetic preparations. Iscaguard DGP is a blend of glycolic emollients which are used to improve the skin and hair conditioning properties of a formulation. By minimising water loss from the skin, Iscaguard DGP imparts a soft, silky feel to end products. Additionally, due to its intrinsic antimicrobial properties, Iscaguard DGP can be used to create “self-preserving” formulations.

In Use Concentrations	ISCA recommendation	EU Cosmetic Regulation (max)
Leave-on	0.8 – 1.5 %	<b>not regulated (Annex V)</b>
Rinse-off	0.8 – 1.5 %	<b>not regulated (Annex V)</b>

In use concentrations vary according to the formulation type and other ingredients present. The correct use dosage should be determined by microbial challenge testing of the finished formulation (ISCA UK offers discounted challenge testing to our customers).

## Recommended Applications

Shampoo, Shower gel (Rinse-off)	Creams, lotions (Leave-on)	O/W emulsions	W/O emulsions	Wet wipes	Eye care	Lip Care	Oral care	Children under 3
•	•	•	•	•	•	•		•

Use scenarios derived from evaluation of Cosmetic Regulation guidelines and preservative performance for typical formulations.

Formulation guidelines	
pH (effective range)	3.0 - 12.0
Solubility (Water)	Low water solubility
Solubility (Glycols)	Miscible with glycols and alcohols
Maximum Process Temperature	80 °C
General information	Iscaguard DGP is compatible with most commonly used personal care ingredients. Due to its low water solubility, it is advisable to pre-dissolve Iscaguard DGP into the non-aqueous phase prior to the addition of water. Alternatively, the product may be added prior to any heating stage in order to aid dissolution.

Minimum Inhibitory Concentrations	
Microorganism	MIC (%)
<b>Bacteria (gram-negative)</b>	
Pseudomonas aeruginosa	0.8
Escherichia coli	0.8
<b>Bacteria (gram-positive)</b>	
Staphylococcus aureus	0.8

Minimum Inhibitory Concentrations	
Microorganism	MIC (%)
<b>Yeasts</b>	
Candida albicans	0.2
<b>Moulds</b>	
Aspergillus brasiliens	0.1


Physical Properties (approximate)	
Appearance	Clear colourless liquid
Colour	< 10 Hazen
Odour	Mild
Density	~0.95 gcm <sup>-3</sup>

Physical Properties (approximate)	
Solubility in water	Low solubility
Solubility in glycols	Miscible

Safety information

Cosmetic Regulation labelling requirements
No special labelling requirements.

Transport information	
	not regulated
UN number	-
UN proper shipping name	-
Transport hazard class	-
Packing group	-
Environmental hazards	-

Hazard classification/labelling	
Hazard pictograms	
Signal word	Danger
Hazard statements	H318 Causes serious eye damage.