

# Iscaguard DU

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

INCI declaration	
Diazolidinyl urea	

Iscaguard DU is a preservative based on Diazolidinyl urea in its pure powder form. It is a versatile, effective preservative for personal care formulations that is highly soluble in water. Iscaguard DU has a broad, balanced spectrum of activity against bacteria, yeasts, mould and fungi.

In Use Concentrations	ISCA recommendation	EU Cosmetic Regulation (max)
Leave-on	0.1 – 0.4 %	0.5 %
Rinse-off	0.1 – 0.4 %	0.5 %

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 – 8.5
Solubility (Water)	70 %
Solubility (Propylene glycol)	40 %
Maximum Process Temperature	40 °C
General information	Heating to 40°C is only recommended for very brief periods of time.

Minimum Inhibitory Concentrations	
Microorganism	MIC (%)
<b>Bacteria (gram-negative)</b>	
Pseudomonas aeruginosa	0.10
Escherichia coli	0.12
Proteus vulgaris	0.13
<b>Bacteria (gram-positive)</b>	
Staphylococcus aureus	0.08
Bacillus cereus	0.10
Enterococcus faecium	0.11

Minimum Inhibitory Concentrations	
Microorganism	MIC (%)
<b>Yeasts</b>	
Candida albicans	0.70
Saccharomyces cerevisiae	0.20
<b>Moulds</b>	
Aspergillus niger	0.30


Physical Properties (approximate)	
Appearance	Fine powder
Colour	White
Odour	Low to mild odour
Density	0.75 gcm <sup>-3</sup>

Physical Properties (approximate)	
pH (1 % in water)	7
Initial boiling point	- °C
Solubility in water	70 %
Solubility in glycols	Soluble

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	Warning
Hazard statements	H317 May cause an allergic skin reaction.