

Cosphaderm® Pentiol GL is a high-purity, transparent and odourless diol characterised by unlimited water solubility due to its two vicinal hydroxyl groups and short carbon backbone. These features make it a preferred ingredient for moisturising and humectant applications in both skin care and hair care formulations. Static light scattering analysis confirms that Cosphaderm® Pentiol GL can additionally stabilise O/W emulsions by reducing droplet size. Pentylene glycol further provides pH-independent antimicrobial activity and demonstrates strong synergistic behaviour in combination with other antimicrobial substances, supporting a reduction in total preservative levels.

### Benefits:

- Unlimited water-solubility
- Synergistic antimicrobial performance supporting preservative optimisation
- Consistent efficacy independent of pH conditions
- Increases emulsion stability through droplet size minimisation



16128

### ISO 16128

Natural Index 0

Natural Origin Index 0

**INCI name** Pentylene Glycol

**Source** Synthetic

**Efficacy Spectrum**

<b>Bacteria:</b>	●
<b>Yeast:</b>	◐
<b>Mould:</b>	◐

**Recommended concentration [%]** 1,00 - 3,00

**Substance Class** Diols

**Function**

- Antimicrobial
- Humectant
- Skin conditioning
- Solvent

**Type of Formulation**

- O/W
- Surfactant-based
- W/O
- Water-based
- Waterfree

**Solubility** • Water-soluble

**Appearance** Clear liquid

**Colour** Colourless

**Odour** Odourless or low odour

**Combinable products**

- Cosphaderm® Octiol
- Cosphaderm® Propanediol natural
- Cosphaderm® GMCY
- Cosphaderm® GMUD
- Cosphaderm® Magnolia Extract 98

**Item No.** 02-007-xxxx

**CAS No.** 5343-92-0

*Disclaimer: This product overview is for informational purposes only and does not constitute an official Technical Data Sheet (TDS). For detailed specifications and further information, please contact our sales team at [info@cosphatec.com](mailto:info@cosphatec.com).*