

# METHYLPROPANEDIOL

INCI **Methylpropanediol**  
 CAS **2163-42-0**

## SPECIFICATIONS

Appearance **Clear colorless liquid**  
 Assay (%) **99.0 min**  
 Color (APHA) **20 max**

## GENERAL INFORMATION

Methylpropanediol, also called MPD, belongs to the group of alkanediols. It is a clear, color- and odor-less liquid that is soluble in water.

It is a good replacement for other glycols such as butylene glycol or propylene glycol, as the touch on the skin isn't tacky.

As an organic glycol it is used in skin care cosmetics as a solvent and allows other ingredients to be distributed evenly on the skin.

In addition Methylpropanediol shows humectant properties necessary for healthy skin as moisture retention decreases due to aging. Methylpropanediol also has antimicrobial benefits and helps to boost the preservative action of other preservatives that are used in the cosmetic product.

## FORMULATION & RECOMMENDATIONS

Methylpropanediol is water soluble at room temperature and can be added directly in the aqueous phase. It is an inert product, that won't react with the other ingredients of the formulation.

Methylpropanediol is acting as solubilizer for preservative and hydrosoluble actives. It can be used in rinse-off and leave-on products.

**Dosage level**  
 Recommended concentration **5 - 25 %**  
 Solubility **soluble in water**

## APPLICATIONS

**Fragrances**  
**Cosmetics**

- Skin Care
- Hair Care
- Sun Care
- Makeup
- Antiperspirant
- Toiletries
- Deodorant

## EFFICACY

The pure product shows an antibacterial activity as reported in the chart below

Bacteria	E.coli	A.niger	C.albicans	S.aureus	P.aeruginosa
MIC (%)	20	10	20	10	10

## BENEFITS

- Easy to handle
- Efficacy antimicrobial agent and preservative booster
- Solubilizer for preservatives and actives
- Long lasting effect as an efficient skin moisturizer

## REGULATORY

ECOCERT/COSMOS **Allowed**  
 NATRUE **Allowed**

## PACKAGING & SHELF LIFE

**Available packaging**  
 200kg drums / 1000 kg IBC

**Shelf life**  
 12 months under proper storage