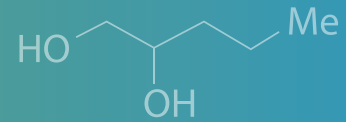




Activonol-5N

NATURAL MULTI FUNCTIONAL GLYCOL

- Natural Pentylene Glycol
- Anti-microbial Effect
- Excellent Moisturizer & Cosmetic Solvent



Abstract **Natural Multi-functional Glycol**

Activonol-5N is an 100 % natural origin glycol (approved by COSMOS & ECOCERT).

Activonol-5N is an excellent moisturizer and cosmetic solvent.

Activonol-5N is colorless and odorless.

It has a good anti-microbial effect by itself and excellent synergistic effect combined with other glycols and preservatives.

As a multi-functional ingredient, Activonol-5N can be applied to natural alternative preservative, moisturizer and cosmetic solvent.

Technical Information

INCI Name	Pentylene Glycol
Technical / Other name	1,2-Pentandiol
CAS No.	5343-92-0
Appearance	Transparent liquid
Aspect	Colorless, Odorless
Solubility	Water soluble
Recommended dosage	3 ~ 6 %

Skin Safety **Human Skin Patch Test**

: Activonol-5N under the single application patch test for 48 hrs to female adults subjects can be considered no irritant.

Test Sample	Concentration	Result
Activonol-5N in O/W emulsion	5 %	No irritant

(IECK 16-K169251)



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Efficacy

1) Anti-microbial effect

(1) MIC test (CTFA method)

MIC (%) for	Activonol-5N (%)
E. coli	3.0
P. aeruginosa	5.0
S.aureus	5.0
C.albicans	5.0
A.niger	3.0

(2) Challenge test (O/W cream - 5.0% of Activonol-5N, CTFA method)

Name	Inoculation (cfu/ml)		D 7		D 14		D 21		D 28	
	Bacteria	Fungi	B	F	B	F	B	F	B	F
Activonol-5N (5%)	5.0 x 10 ⁶	1.3 x 10 ⁶	6.7	3.0	6.7	4.6	6.7	6.1	6.7	6.1

*CTFA Criteria : Bacteria ≥ 3 and maintain, Fungi ≥ 1 and maintain

Activonol-5N showed the anti-microbial effect to all spectrum at 5 % dosage.

2) Multi-functional effects

- (1) Moisturizing effect : Excellent skin moisturizer
- (2) Enhance water resistance in sunscreen
- (3) Co-emulsifier : Reducing particle size of emulsions

REF: R.Pillai et al, SOWF-Journal, vol 131, pg 13-22 (2005)