



Activonol-M

ALTERNATIVE PRESERVATIVE FOR FACIAL MASK SHEET

- **Optimized Combination for Facial Mask Sheet**
- **Safe & Non-irritant**
- **Reasonable Price**
- **Excellent Compatibility; Water Soluble**



Abstract

Activonol-M was developed for use in cosmetic formulations, particularly effective in facial mask sheet formulation.

Activonol-M has a broad, balanced spectrum of effect against bacteria and fungi from the optimized combination of anti-microbial ingredients without parabens and phenoxyethanol.

Activonol-M can be applied to facial mask sheet and wet-tissue formulation in wide temperature and pH range with excellent compatibility.

Technical Information

INCI Name	Dipropylene glycol, Hydroxyacetophenone, Caprylyl glycol, Dipotassium glycyrrhizate
CAS No.	25265-71-8, 99-93-4, 1117-86-8, 68797-35-3
Appearance	Transparent liquid
Aspect	Characteristic odor
Solubility	3.0 % Soluble in water, Freely miscible in glycols
Recommended dosage	1.0 % to 1.5 % in Facial mask sheet and wet tissue

Skin Safety **Human Skin Patch Test**

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

Test Sample	Concentration	Result
Activonol-M in Facial Mask Sheet Formulation	2 %	No irritant

(IECK 16-K169018)



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Efficacy

1) Anti-microbial effect

(1) MIC test (CTFA method)

MIC (%) for	Activonol-M (%)
E. coli	0.5
P. aeruginosa	1.0
S.aureus	1.0
C.albicans	1.0
A.niger	0.5

(2) Challenge test (Facial Mask Sheet - 1.0% of Activonol-M, 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-M (1%)	2.0 x 10 ⁶	3.4 x 10 ⁶	6.3	6.5	6.3	6.5	6.3	6.5	6.3	6.5

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

(3) Challenge test (Wet Tissue - 1.5% of Activonol-M, 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-M (1.5%)	2.0 x 10 ⁶	3.4 x 10 ⁶	6.3	6.5	6.3	6.5	6.3	6.5	6.3	6.5

Activonol-M showed an excellent anti-microbial effect to all spectrum at 1 ~ 1.5 % dosage.

2) Sensory Evaluation : Eye area



*Internal Test
(Ages from 20s to 40s, 10 Female/Male Volunteers)

Test Sample	Test Sample	Concentration	Score	Result
Activonol-M	Eye mask sheet	1.0 %	0	No sensory irritant

Activonol-M showed zero score of itching, burning and other side effect, indicating no sensory irritation from treatment of eye mask sheet containing 1.0%.