



MAMMALIAN TOXICOLOGY OF MONOETHANOLAMIDES (MEA)

Applicable to these current Stepan products:

NINOL® CMF E NINOL® COMF NINOL® CMEA-E	NINOL® CMP NINOL® LMP NINOL® COMF-N	NINOL® COMEA NINOL® SCMP
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Applicable to these inactive Stepan products:

NINOL® C12 LMP		
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Toxicological Information:

<u>Test/Conditions</u>	<u>Results /Classification</u>	<u>References</u>
Acute Oral Toxicity (rat) (14 day)	LD ₅₀ =1.72 to 2.74 g/kg (slightly toxic orally)	IJTOFN ¹
Subchronic Inhalation (dog/rodents)	LC ₅₀ >12-26ppm	IJTOFN
Primary Dermal Irritation (rabbit) (4 hr. exposure)	≤ 10% - corrosive >1%-extremely irritating	IJTOFN
Primary Eye Irritation (rabbit) (24 hr.)	Severe eye irritation at concentration ≥ 1%	IJTOFN
Mutagenicity Study (Ames Study)	Not mutagenic	IJTOFN
Skin Sensitization (RIPT) ² (human)	Product is an irritant but not a contact sensitizer	IJTOFN

Conclusion:

The Cosmetic Ingredient Review (CIR) Expert Panel has concluded that COCAMIDE MEA is safe as used in rinse-off products and safe at concentrations up to 10% in leave on products.

¹International Journal of Toxicology, Vol. 18, Supp. 2, 1999, pp. 9-16.

²Repeat Insult Patch Test

References:

NINOL® is a registered trademark of Stepan Company.

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