



MAMMALIAN TOXICOLOGY OF BETAINES

Applicable to these current Stepan products:

AMPHOSOL® 810-B	AMPHOSOL® CA	AMPHOSOL® CA-K
AMPHOSOL® CDB-HP	AMPHOSOL® CG	AMPHOSOL® CG-50
AMPHOSOL® DM	AMPHOSOL® DM-X	AMPHOSOL® HCA-HP
AMPHOSOL® HCA-HP-X	AMPHOSOL® HCA-K-X	AMPHOSOL® HCG
AMPHOSOL® HCG-HP	AMPHOSOL® HCG-K	AMPHOSOL® LB
PETROSTEP® CG-50	AMPHOSOL® CG-50-X	AMPHOSOL® CG-C-X
AMPHOSOL® CG-U-X	AMPHOSOL® HCA-SB	AMPHOSOL® DM/MB

Applicable to these inactive Stepan products:

AMPHOSOL® CG-K	AMPHOSOL® HCA	AMPHOSOL® LDB
AMPHOSOL® CDB	AMPHOSOL HCA-C	

Toxicological Information:

Mammalian Toxicology:		
<u>Test/Conditions</u>	<u>Results/Classification</u>	<u>References</u>
Acute Oral Toxicity (rat) (14 day) n=5/sex/dose	LD50 5g/kg (slightly toxic orally)	Stepan Study No. 82-001D
Primary Eye Irritation (rabbit) n=6	MMS1 27.5/110 (moderately irritating to eyes) at neutral pH (10% active)	Stepan Study No. 82-001E
Primary Skin Irritation (rabbit) n=6	PII2 = 1.75/8 (mildly irritating to skin) at neutral pH (10% active)	Stepan Study No. 82-001F
Delayed contact sensitization study (guinea pig)	No evidence of delayed contact hypersensitivity observed @ 0.5% (v/v)	JACT3
Sensitization Study (human) (patch) n=88 to 141	No evidence of sensitization	JACT
28-Day Subchronic Toxicity Study (rat) (doses: 100, 500, 1000 mg/kg)	No adverse effects observed at 100 mg/kg	JACT

body wt.)		
Mutagenicity Study (Ames Test)	Not mutagenic	JACT
Mutagenicity Study (Mouse Micronuclear Assay)	Not mutagenic	JACT
Carcinogenicity Study (dermal) (mice) n=60 duration 20 months	Not a carcinogen	JACT

References:

1MMS=Maximum Group Mean Score

2PII=Primary Irritation Index

3JACT=Journal of American College of Toxicology, Vol. 10, No. 1, 1991 (pp. 33-52)

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