Technical Information | **Stepan**

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MAMMALIAN TOXICOLOGY OF DIAMIDOAMINE QUATERNARIES

Applicable to these current Stepan products:

ACCOSOFT® 460 HC	ACCOSOFT® 501	ACCOSOFT® 501 DEG
ACCOSOFT® 550-75	ACCOSOFT® 550-90 HF	ACCOSOFT® 550-90 HHV
ACCOSOFT® 550-PG	ACCOSOFT® 580	ACCOSOFT® 620-75
ACCOSOFT® 780	ACCOSOFT® 780 PG	

Applicable to these inactive Stepan products:

ACCOSOFT® 440-75%	ACCOSOFT® 502	ACCOSOFT® 540
ACCOSOFT® 540 HC	ACCOSOFT® 550 HFC	ACCOSOFT® 550L-90
ACCOSOFT® 570	ACCOSOFT® 570 HC	ACCOSOFT® 750
ACCOSOFT® 620-90%		

Toxicological Information:

Test/Conditions	Results/Classification	References
Mammalian Toxicology:		
Acute Oral Toxicity (rat) (gavage) (14 day)	LD_{50} > 5g/kg (practically non-toxic orally)	Stepan Study No. 78-032B (Industry Consortium Data)
Acute Percutaneous absorption (rabbit) (14 day)	LD_{50} > 2g/kg (slightly toxic dermally) No signs of systemic toxicity	Stepan Study No. 81-015A (Industry Consortium Data)
Primary Eye Irritation (rabbit) (24 hr) n=6	MMS[1] = 1/110 (minimal eye irritation @ 5% dispersion)	Stepan Study No. 78-032C (Industry Consortium Data)
Primary Skin Irritation (rabbit) (24 hr exposure) n=6	PII[2] = 0.8/8 (slightly irritating to skin @ 5% dispersion)	Stepan Study No. 78-032C (Industry Consortium Data)
Human Patch Test (24 hr. exposure) (over a 6 day period)	Minimal skin irritation at concentrations of up to 20% w/v	Industry Consortium Data
Human Patch Test	No skin sensitization	Industry Consortium Data

(24 hr. contact) (9 exposures over 21 days) (n=205)	observed 25% w/v aqueous solution	
Subchronic Percutaneous Toxicity Study (rabbit) (4 wks)	No treatment related chemical changes observed. The systemic no-observed effect level (NOEL) was 300mg/kg	Industry Consortium Data
Genotoxicity Studies i.) Ames ii.) Mouse Lymphoma Assey	 Not a mutagen Negative	Industry Consortium Data

MMS[1] =Maximum Group Mean Score

PII[2] = Primary Skin Irritation Index

References:

Last Update: November 9, 2023 Revision Reference: TX041-02