



MAMMALIAN TOXICOLOGY OF IMIDAZOLINE QUATERNARIES

Applicable to these current Stepan products:

ACCOSOFT® 808 ACCOSOFT 980 PG	ACCOSOFT® 808-90	ACCOSOFT 980
----------------------------------	------------------	--------------

Applicable to these inactive Stepan products:

ACCOSOFT® 801	ACCOSOFT® 808 HT	
---------------	------------------	--

Toxicological Information:

<u>Test/Conditions</u>	<u>Results/Classification</u>	<u>References</u>
Mammalian Toxicology:		
Acute Oral Toxicity (rats) (14 day) (diet)	LD ₅₀ > 20 g/kg (practically non-toxic orally)	Industry Consortium Data
Acute Percutaneous Toxicity (rabbit) n=6	LD ₅₀ > 2 g/kg The skin in 2/6 animals was noted to be severely thickened. No other effects observed.	Stepan Study No. 82-015C (Industry Consortium Data)
Primary Skin Irritation (rabbit) n=6	PII ¹ =1.75/8 (mildly irritating to skin)	Stepan Study No. 76-054A (Industry Consortium Data)
Dermal Sensitization (guinea pigs) (modified closed patch technique)	Not a sensitizer	Stepan Study No. 81-013A
28-Day Subchronic Oral Toxicity Study (rat) (gavage) n=5/sex/dose	No treatment related toxicity observed in any of the tested groups (0, 4, 40 and 400 mg/kg/day)	Stepan Study No. 85-024A (Industry Consortium Data)
91 -day Subchronic Percutaneous Toxicity Study (rabbit) 5-day/week/13weeks	Slight to moderate erythema/edemia No evidence of systemic toxicity @ 3 and 30 mg/kg	Stepan Study No. 83-010B (Industry Consortium Data)

91- Day Subchronic Oral Toxicity Study (rabbit)	No animals died. All microscopic and macroscopic observations were considered incidental. Male animals fed 1000 mg/kg showed an increase in liver enzymes (doses: 0, 10, 100, 1000 mg/kg/day)	Stepan Study No. 83-010C (Industry Consortium Data)
Mutagenicity Study (Ames test)	Negative	Stepan Study No. 79-014A (Industry Consortium Data)
Teratogenicity Study (rabbit) (gavage)	No evidence of teratogenicity at any of the dose levels stored (60, 180, 540 mg/kg/day).	Stepan Study No. 79-013E (Industry Consortium Data)

References:

PII1= Primary Irritation Index

ACCOSOFT® ; ® are registered trademarks of Stepan Company.

Last Update: 02/25/2003

Revision Reference: TX043-00

Nothing contained herein grants or extends a license, express or implied, in connection with patents, issued or pending, of the manufacturer or others. The information contained herein is based on the manufacturer's own study and the works of others. The manufacturer makes no warranties, expressed or implied, as to the accuracy, completeness, or adequacy of the information contained herein. The manufacturer shall not be liable (regardless of fault) to the vendee's employees, or anyone for any direct, special or consequential damages arising out of or in connection with the accuracy, completeness, adequacy or furnishing of such information.