



BIODEGRADATION OF ACCOSOFT® FABRIC SOFTENERS

Applicable to these current Stepan products:

ACCOSOFT® 440-75	ACCOSOFT® 440-75 DEG	ACCOSOFT® 460 HC
ACCOSOFT® 501	ACCOSOFT® 501 DEG	ACCOSOFT® 502
ACCOSOFT® 540	ACCOSOFT® 550-75	ACCOSOFT® 550-90 HF
ACCOSOFT® 550-90 HHV	ACCOSOFT® 550-PG	ACCOSOFT® 550L-90
ACCOSOFT® 570	ACCOSOFT® 580	ACCOSOFT® 620-75
ACCOSOFT® 620-90	ACCOSOFT® 750	ACCOSOFT® 780
ACCOSOFT® 780 PG	ACCOSOFT® 808	ACCOSOFT® 808-90
ACCOSOFT® 808 HT	ACCOSOFT® 550-80 HHV%	ACCOSOFT® T-90

Applicable to these inactive Stepan products:

ACCOSOFT® 540 HC	ACCOSOFT® 801	
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Biodegradation Information:

ACCOSOFT® Fabric Softeners, which consist of diamidoamine or imidazoline QAMSt, are part of the cationic group of surfactants. The biodegradation of these surfactants was extensively reviewed by experts at a symposium.

It was concluded that the fabric softeners are eliminated more than 90% by a two step process. During sewage treatment there is microbial degradation to carbon dioxide and also adsorption to the particulate sludge. The adsorbed portion is subsequently biodegraded when the sludge is incorporated into agricultural land. Therefore, ACCOSOFT® Fabric Softeners are considered to be inherently biodegradable.

References:

*Anonymous, 1982, Symposium: "Cationic Surfactants and the Environment", Summary in Tenside Detergents, 19 (3) pp. 183.

*Boethling, R.S., 1984. Environmental Fate and Toxicity in Wastewater Treatment of Quaternary Ammonium Surfactants. Water Res. 18 pp. 1061-1076.

ACCOSOFT® is a registered trademark of Stepan Company.

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