



BIODEGRADATION OF ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDES (ADBAC)

Applicable to these current Stepan products:

BTC® 2565	BTC® 2568	BTC® 50
BTC® 65	BTC® 776	BTC® 824
BTC® 824 P100	BTC® 8248	BTC® 8249
BTC® 835	BTC® 8358	STEPANQUAT® 50 NF
STEPANQUAT® 65 NF	STEPANQUAT® 8358	STEPANQUAT® 835

Biodegradation Information:

Alkyl Dimethyl Benzyl Ammonium Chlorides (ADBAC) applications are wide ranging, from disinfectant formulation to microbial corrosion inhibition. Considered one of the safest synthetic biocides known with a long history of efficacious use.

Numerous laboratory studies have shown that the chain lengths of ADBAC, found in Stepan surfactants identified above, biodegrade readily in aerobic and anaerobic conditions. DOC Die-away studies have been found to reach 85% within 5 days⁽¹⁾. Ultimate biodegradation of benzylalkonium chlorides have been shown to reach up to 85% in 28 days⁽²⁾. The Stepan ADBAC products identified above are considered to be readily biodegradable by OECD standards. Removal of ADBAC compounds during a SCAS removability test show removal rates of 100%⁽³⁾.

References:

(1) Refer to Stepan Study 07-022A; (2) Refer to Stepan Study 92-027A; (3) Refer to Stepan Study 92-026A

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