Technical Stepan Information

Stepan Company

Northfield, Illinois 60093 Telephone 847 446 7500



ECOTOXICOLOGY OF AMINE OXIDES

Applicable to these current Stepan products:

	AMMONYX® LO-BR	AMMONYX® LO AMMONYX® LO Special AMMONYX® MO	
Applicable to these inactive Stepan products:			
AMMONYX® C	AMMONYX® DMCD-40		

Toxicological Information:

Test/Conditions	Results/Classification	References
Acute aquatic toxicity	Carbon chain lengths <u><</u> 14:	ECHA REACH Dossiers
to fish (96 hr.)	LC50 = 2 - 32 mg/L (moderately toxic)	& HPV Assessment
	Carbon chain lengths > 14:	
	LC50 0.6 - 1.4 mg/L (highly toxic)	
Acute aquatic toxicity	Carbon chain lengths 14:	ECHA REACH Dossiers & HPV Assessment
to daphnia (48 hr.)	EC50 1-11.0 mg/L (moderately toxic)	
	Carbon chain lengths > 14:	
	EC50 < 1 mg/L (highly toxic)	
Acute aquatic toxicity to alga (72 hr.)	Carbon chain lengths 12-18: ErC50 = 0.8 - 0.1 mg/L (highly toxic)	ECHA REACH Dossiers & HPV Assessment
Chronic aquatic toxicity to fish (302 days)	NOEC = 0.42 mg/L	ECHA REACH Dossiers & HPV Assessment
Chronic aquatic toxicity to daphnia (21 days)	NOEC = 0.7 mg/L	ECHA REACH Dossiers
Chronic aquatic toxicity to alga	NOEC = 0.067 mg/L	ECHA REACH Dossiers

Note: NOEC - No Observed Effective Concentration

References:

ECHA REACH Dossiers for Amine Oxides.

OECD SIDS Initial Assessment Report, 2006.

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