

ACUTE TOXICITY TO AQUATIC INVERTEBRATES (DAPHNIA MAGNA)

TEST SUBSTANCE

Identity: A mixture containing perfluorooctanesulfonate; may also be referred to as PFOS, FC-95, or as a component of FC-203C and L-5440. (1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptafluoro-, potassium salt, CAS # 2795-39-3)

Remarks: The 3M production lot number was 501. The test sample is FC-203C. Current information indicates it is a mixture of 1.47% test substance, 60% water, 30% diethylene glycol butyl ether, 3% sodium octyl sulfate, 3% hydroxy foamer, 10% polyoxyethylene monoethylphenyl ether, 0.12% sodium lauryl sulfate, and 0.05% benzotriazol.

The following summary applies to the test sample as a mixture of the test substance in water solution with incompletely characterized concentration of impurities. Data may not accurately relate toxicity of the test sample with that of the fluorochemical component.

METHOD:

Method: Not given

Type: Static acute

GLP: No

Year completed: 1981

Species: *Daphnia magna*

Supplier: Not given.

Analytical monitoring: Not given.

Exposure period: 48-hours

Test organism age: Not given.

Statistical methods: No calculations performed, based on study results.

Test conditions:

Dilution water: Not given.

Dilution water chemistry: Not given.

Lighting: Not given.

Stock and test solution preparation: Not given.

Exposure vessels: Not given.

Number of replicates: Not given.

Number of daphnids per replicate: Not given.

Number of concentrations: Not given.

Water chemistry during the study: Not given.

RESULTS

Nominal concentrations: Not given.

Element values based on nominal concentrations.

Remarks: Testing was conducted on the mixture of the test substance as described in the test substance remarks field. The values reported apply to that mixture and not the fluorochemical proportion alone.

CONCLUSIONS

No mortality was observed during the study.

Submitter: 3M Company, Environmental Laboratory, P.O. Box 33331,
St. Paul, Minnesota, 55133

DATA QUALITY

Reliability: Klimisch ranking = 4. Values are from a summary sheet only – raw data not found. Test concentrations not provided. Study lacks description and records of the method followed. There is no characterization of the test substance purity, analytical measurement of the test concentrations, and confirmation of the amount of fluorochemical proportion in the solution.

REFERENCES

Test was conducted by the 3M Company, Environmental Laboratory, St. Paul, MN, Lab Request number 6811S, 1981.

OTHER

Last changed: 6/26/00.

LAB REQUEST NO. 6811S
REQUESTOR NAME: EAR
DEPARTMENT: 0535
PROJECT NO: 9970012600
DATE RECEIVED: 04/29/1981
DESC: FC203C L5440 LOT 501

CONTRACT LAB(S):
EXP COMP DATE: 07/20/1981
DATE COMPLETED: 07/06/1981
PROJECT LEAD: SA BEACH
PHONE NO: 651-778-7452
3M FAX NO: 651-778-6176

SAMPLE	DATE	CODE	DESCRIPTION	RESULT	MDL or (95% C.I.)
1		FC203C	CC814-28		
	48-HR-EC50	DAPHNIA ACUTE TEST		NO MORT ALITY	
	96-HR-LC50	FISH ACUTE TEST - 96 HOUR		HOLD	
	BOD-05	BOD-05		SEE ATTACHED REPORT	
	COD	COD		776000 MG/KG	
	FOAM-POT	FOAMING POTENTIAL		SEE ATTACHED REPORT	
	IC50-ALGAE	ALGAE ASSAY - IC50		SEE ATTACHED REPORT	
	SLUDGE-TOX	SLUDGE TOXICITY		SEE ATTACHED REPORT	
2			DUP 1		
	COD	COD		771000 MG/KG	