

BIODEGRADATION

TEST SUBSTANCE

Identity: N-Ethylperfluorooctanesulfonamide; may also be referred to as U1464, EtFOSA, EtPOSA, F-6309, or FX-12. (1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptafluoro-N-ethyl-, CAS # 4151-50-2)

Remarks: Material is a white solid. Sample purity and lot number were not recorded.

The report with supporting information could not be located for this study. What is summarized is the computer print-out reporting final results.

METHOD

Method: Not noted.

Type: Aerobic

GLP: No

Year completed: 1984

Test solution preparation: A solubilizing agent, FX-3250 was used to dissolve the test substance in the BOD medium. This agent is mixture of perfluorinated carbon chains (C5-C18). Other studies were reported under the same study number measuring COD with and without the presence of the solubilizing agent.

Contact time: 20 days

Inoculum: Not noted

RESULTS

5-day BOD:	< 940 mg/kg
10-day BOD:	< 960 mg/kg
20-day BOD:	< 940 mg/kg
COD:	22,000 mg/kg

CONCLUSIONS

This testing indicated that the test substance is not capable of readily biodegrading in aerobic environments.

DATA QUALITY

Reliability: Klimisch ranking 4. Summary was created using only a listing of test values. The original study procedure and raw data were not found.

REFERENCES

This study was conducted by the 3M Company, Environmental Laboratory, Lab Request number B1479, 6/12/84

OTHER

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

Last changed: 5/18/00

006036

LAB REQUEST NO. B1479
REQUESTOR NAME: EAR/ANW
DEPARTMENT: 0535
PROJECT NO: 9970012600
DATE RECEIVED: 04/13/1984
DESC: FX-12 REPEAT STUDY & MODIFICATIONS

CONTRACT LAB(S):
EXP COMP DATE: 06/14/1984
DATE COMPLETED: 06/12/1984
PROJECT LEAD:
PHONE NO:
3M FAX NO: 651-778-6176

MATERIAL IS INSOLUBLE. RATHER THAN USING ACETONE AGAIN TO SOLUBILIZE THE
FX-12 FOR BOD DETERMINATIONS USE FX-3250 A COMMERCIAL CHEMICAL DIV.
MATERIAL AS THE SOLUBILIZING AGENT.

COD-RFX FOR SAMPLES 1, 2 AND 3 WAS RUN ON SAMPLES AFTER SOLVENT WAS DRIVEN
OFF WITH NITROGEN. COD-RFX FOR SAMPLES 4, 5 AND 8 WAS RUN WITHOUT
EVAPORATION OF SOLVENT. SAMPLES 6 AND 7 WERE RUN WITHOUT ANY FX-3250.

SAMPLE	DATE	CODE	DESCRIPTION	RESULT	MDL or (95% C.I.)
1			W/O FX-3250		
		C-BOD-05	BOD-05 (CARBONACEOUS)	NOT ANALYZED	
		C-BOD-10	BOD-10 (CARBONACEOUS)	NOT ANALYZED	
		C-BOD-20	BOD-20 (CARBONACEOUS)	NOT ANALYZED	
		COD-RFX	COD (DICHROMATE REFLUX)	17000 MG/KG	
2		COATED	WITH FX-3250		
		C-BOD-05	BOD-05 (CARBONACEOUS)	<940 MG/KG	
		C-BOD-10	BOD-10 (CARBONACEOUS)	<960 MG/KG	
		C-BOD-20	BOD-20 (CARBONACEOUS)	<940 MG/KG	
		COD-RFX	COD (DICHROMATE REFLUX)	22000 MG/KG	
3		5MLRES	FX-3250		
		C-BOD-05	BOD-05 (CARBONACEOUS)	NOT ANALYZED	
		C-BOD-10	BOD-10 (CARBONACEOUS)	NOT ANALYZED	
		C-BOD-20	BOD-20 (CARBONACEOUS)	NOT ANALYZED	
		COD-RFX	COD (DICHROMATE REFLUX)	41 MG/L	
4		0.5 G	W/FX-3250		
		COD-RFX	COD (DICHROMATE REFLUX)	3900 MG/L	
5			DUP 4		
		COD-RFX	COD (DICHROMATE REFLUX)	3400 MG/L	
6		0.5 G	W/O FX-3250		
		COD-RFX	COD (DICHROMATE REFLUX)	24000 MG/KG	
7			DUP 6		
		COD-RFX	COD (DICHROMATE REFLUX)	23000 MG/KG	

ARCHIVED FINAL REPORT

LAB REQUEST NO. B1479

CONTINUED

SAMPLE	DATE	CODE	DESCRIPTION	RESULT	MDL or (95% C.I.)
8			FX-3250		
	COD-RFX	COD (DICHROMATE REFLUX)		78 MG/L	

006038