

BIODEGRADATION (BOD/COD)

TEST SUBSTANCE

Identity: A mixture containing perfluorooctanesulfonate, which may also be referred to as PFOS, FC-95, or as a component of FC-203A. (1-Octanesulfonic acid) (CAS # 2795-39-3).

Remarks: The 3M production lot number was not provided. The test sample is FC-203A. Current information indicates it is a mixture of 1.34% PFOS, 25% diethylene glycol butyl ether, 67.85% water, 2.66% Sultone foamer, 3% sodium octyl sulfate, 0.1% sodium lauryl sulfate, and 0.05% tolyltriazole.

The following summary applies to a mixture with incompletely characterized concentrations of impurities. Data may not accurately reflect the biodegradability of the fluorochemical component of the test sample.

METHOD:

Method: Not noted.
Type: Aerobic
GLP: No
Year completed: 1975
Contact time: 20 days
Inoculum: Source not given.

RESULTS

Total Organic Carbon (TOC):	121,000 mg/L (calculated)
Chemical Oxygen Demand (COD):	648,000 mg/L
Biochemical Oxygen Demand (BOD):	
5-Day:	72,000 mg/L
10-Day:	407,500 mg/L
15-Day:	405,000 mg/L
20-Day:	427,500 mg/L

CONCLUSIONS

No conclusions given.

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

DATA QUALITY

Reliability: Klimisch ranking 4. Values from a summary sheet only. Study lacks description and records of the method followed. The inoculum is not properly characterized. There is no characterization of the test substance purity and the study lacks analytical confirmation of the fluorochemical concentration in the solution.

REFERENCES

The studies were conducted by the 3M Company, Environmental Laboratory, St. Paul, MN, Lab Request number 2543, 1975.

OTHER

Last changed: 6/26/00

Return to FC-203A TOL

PRODUCT ECOLOGICAL ASSESSMENT
REQUEST FOR LABORATORY WORK

Ref: ENVIR. ASSESS. INQ. # _____ DIVISION

LAB REQUEST NO. 2543

PRODUCT: _____

REQUESTER

Name: Dale Bacon Phone No. 5453
Request Date: 12/13
Project No.: 73-5760 Prob. No. 2-1000 08
Corle No.: 28 2900
Sample Date: _____ Date Needed: 1/30
Description: _____
Purpose of Tests: _____

LABORATORY

Date Received Sample: 12/13
Analyst: _____
Date Completed: 1/28/75
Hours Spent: _____
Y 75 B 19 P 20
Please Call Requester If Delays Are Encountered.

PHYSICAL & CHEMICAL PROPERTIES

Heat of Combustion Cal/G (BTU/Lb.)

Density

Ash

Other

FC 201

FC 203A

FC 225

FC 83

WATER POLLUTION

pH

COD

BOD₅

BOD, Ultimate

TOC

GC

Oxygen Uptake

Dehydrogenase Activity (TTC)

Other

✓	1,040,000	✓	648,000	✓	444,000	✓	808,000
✓	188,000	✓	72,000	✓	92,000	✓	270,000
✓	666,000	✓	427,500	✓	101,300	✓	270,000
✗		✗		✗			

BIOASSAY

Specify Organism and Method:

Fathenel / SIMIC

LEACHATE FROM LEACHING TEST

pH

COD

BOD₅

BOD, Ultimate

TOC

GC

Bioassay

Other

OTHER

Bioaccumulation

Persistence

Degradation Products

Recyclability

Burnability

Weathering

FC-CHEMICALS

20

[illegible]

Calculated TOC for FC-203A
based on difference in formulation from
FC-203

ie its - 20% ethylene glycol
and - 10% butyl carbitol.

FC-203A

Calculated TOC

121,000 mg/l

calculation considered specific gravity of
products.