



Form 6/71A

TECHNICAL REPORT SUMMARY

Date
June 20, 1979

TO: TECHNICAL COMMUNICATIONS CENTER - 201-2CN

(Important - If report is printed on both sides of paper, send two copies to TCC.)

Division	CENTRAL RESEARCH LABORATORIES, Analytical and Properties Research Laboratory	Dept. Number	0502
Project	Trace Fluorochemicals in the Environment	Project Number	A000007
Report Title	AR No. 7166 - FC-143 Inhalation Study - Analysis For F ⁻ and RF	Report Number	166
To	W. C. McCORMICK - 220-2E		
Author(s)	ION BELISLE, VICKI BUNNELLE	Employee Number(s)	088240, 013817
Notebook Reference		No. of Pages Including Coversheet	2
SECURITY ►	☐ Open (Company Confidential)	☒ Closed (Special Authorization)	3M CHEMICAL REGISTRY ►
			New Chemicals Reported ☐ Yes ☒ No

KEYWORDS:
(Select terms from 3M
Thesaurus. Suggest other
applicable terms.)Central Research
Analytical Report
Chemical Analysis

CURRENT OBJECTIVE:

Request No. A71423
Requestor - Bill McCormick
Project No. 91721100

REPORT ABSTRACT: (200-250 words) This abstract information is distributed by the Technical Communications Center to alert 3M's to Company R&D. It is Company confidential material.

The analysis of serum from the Bio/Dynamics rat inhalation study of FC-143 is reported in terms of organic and inorganic fluoride.

ABSTRACT CLOSED

CENTRAL ANALYTICAL LABORATORY

Report No.7166.....

Date.....June 20, 1979.....

Subject: FC-143 Inhalation Study - Analysis For F⁻ and RF

Requestor: ..Bill McCormick..

Dept. Name ..Toxicology....

Proj. No. ..91721100

Request No. ..A71423.....

Dated ...February 15, 1979...

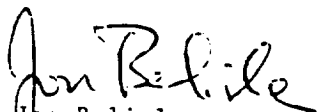
Report:

Serum from Bio/Dynamics study 78-7184 (3M designation T-2305 CoC) was received for analysis of organic and inorganic fluoride. The 2 submitted samples were from Group I, one being the male rats (animals 10-14) and the other female rats (animals 20-24). Therefore, only one exposure concentration was analyzed.

<u>Rat</u>	<u>F⁻ (Inorganic)</u>	<u>RF (Organic)</u>
female	0.01 ppm	2 ppm
male	0.02	42

It is most interesting to once again see the difference in RF levels between male and female. You will recall that the 28 day IBT and the 90 day IRDC feeding study (both reported on Request A67821, Report 6925) found the male serum FC-143 levels approximately 100x greater than the female serum levels. The difference was confirmed by analysis of the IRDC livers.

Therefore, 3 separate studies (IBT, IRDC, Bio/Dynamics) using 2 approaches (feeding, inhalation) indicate that the male rat accumulates more perfluorooctanoic acid/salt than the female. A similar study on monkeys (A68616, Report 6919) indicated no or very little difference between male and female.


Jon Belisle


Vicki Bunnelle

JB/VB/rs