Z-45 REV 12-79

E. I. DU PONT DE NEMOURS & COMPANY
INCORPORATED
WILMINGTON, DELAWARE 19898

POLYMER PRODUCTS DEPARTMENT
EXPERIMENTAL STATION

cc: A. J. Dahl - 353
B. W. Karrh - [illegible]
L. J. Papa - 269
Pral File
I.C.

Complainant's Exhibit No. 75

AR226-1610

PERSONAL AND CONFIDENTIAL

January 6, 1982

TO: DR. Y. L. POWER - PPD, Parkersburg

FROM: S. S. STAFFORD S. Stafford

ANALYSIS OF BLOOD SAMPLES FOR PERFLUOROOCTANOATE
(Job No. 810-578; PRAL Nos. 81-5443-5461;81-5791-5808;
Notebook Nos. E22514,E26238,E27432,E27433)

As requested in your letters of 11/17 and 12/01/81 to L. J. Papa, the 37 blood samples submitted then have been analyzed for perfluorooctanoate (C_8) by the usual gas chromatographic method ES-567. Results and sample identification are given in the attached table.

Attachment
jah

Key Words:
Perfluorooctanoate
GC
Blood Analysis

There's a world of things we're doing something about

EXP000074
EID713888

TABLE I

CONCENTRATION OF PERFLUOROOCTANOATE IN BLOOD (a)

Sample				GC Analysis (b)	
PRAL No.	Date Sampled	P.R.No.	Name	Date Analyzed	$[C_8]$, µg F/g blood
81-5443	11/4/81	W.S.	[redacted]	12/11/81	1.4
81-5444	11/4/81	1429		12/9/81	0.60
81-5445	11/5/81	3564		12/11/81	2.2
81-5446	11/5/81	4527		12/11/81	1.31
81-5447	11/5/81	4444		12/9 & 12/15/81	0.26
81-5448	11/5/81	4631		12/9 & 12/15/81	0.15
81-5449	11/6/81	3659		12/9/81	0.24
81-5450	11/9/81	W.S.		12/11/81	3.4
81-5451	11/9/81	1510		12/11/81	1.8
81-5452	11/10/81	1775		12/9/81	0.40
81-5453	11/11/81	3669		12/9/81	0.31
81-5454	11/12/81	W.S.		12/11 & 12/16/81	0.39
81-5455	11/12/81	W.S.		12/11/81	0.10
81-5456	11/12/81	4766		12/11/81	0.052
81-5457	11/12/81	3015		12/11/81	1.6
81-5458	11/13/81	W.S.		12/11/81	0.12
81-5459	11/13/81	3260		12/15/81	0.26
81-5460	11/16/81	3506		12/15/81	0.094
81-5461	11/16/81	3927		12/11/81	0.31
81-5791	11/17/81	W.S.		12/15/81	0.25
81-5792	11/18/81	3116		12/15/81	0.46
81-5793	11/18/81	Pensioner (1498)		12/15 & 12/21/81	2.5
81-5794	11/18/81	3019		12/15/81	0.23
81-5795	11/18/81	4108		12/15/81	0.11
81-5796	11/19/81	4543		12/16/81	0.60
81-5797	11/19/81	933		12/15/81	0.93
81-5798	11/19/81	4141		12/16/81	0.32
81-5799	11/20/81	3659		12/16/81	0.14
81-5800	11/20/81	W.S.		12/16/81	0.11
81-5801	11/23/81	1831		12/16/81	0.16

EXP000075

REDACTED EID713889

TABLE I

CONCENTRATION OF PERFLUOROOCTANOATE IN BLOOD (a)

Sample PRAL No.	Date Sampled	P.R.No.	Name	GC Analysis Date Analyzed	(b) $[C_8]$, µg F/g blood
81-5302	11/23/81	1594	[redacted]	12/16/81	0.069
81-5803	11/23/81	1625		12/16/81	0.19
81-5804	11/23/81	W.S.		12/17/81	0.025
81-5805	11/24/81	W.S.		12/16/81	0.55
81-5806	11/25/81	4781		12/17/81	0.024
81-5807	11/25/81	3281		12/17/81	0.26
81-5808	11/30/81	1612		12/17/81	0.43
81-1447	4/6/81	4444		12/15/81	0.16 (c)
81-1836	4/27/81	1498		12/15 & 12/21/81	2.8 (c)
81-3926	8/12/81	4631		12/15 & 12/17/81	0.17 (0.166, c)

(a) Analysis as described in Lab Method ES-567 ("Determination of Perfluorooctanoic Acid in Blood, Gas Chromatographic Method", S. Stafford, 4/3/81), using the packed column GC analysis with perfluoro-n-octanoic acid as calibration standard.

(b) Although the analysis is specifically for perfluorooctanoate (acid or salts), concentrations are given in ppm fluorine for comparison with the results of total organic fluorine analyses. (ppm F = 0.688 x ppm perfluorooctanoic acid) Estimated uncertainty is ± 10% relative standard deviation. The lower limit for quantitation is 0.007 µgF/g. The detection limit is ~ 0.004 µgF/g, but concentrations in that range cannot be well quantitated and are reported as < 0.007. None detected (n.d.) is reported for samples with $[C_8] \lesssim 0.004$ ppm, which cannot be distinguished from reagent background.

(c) Previously analyzed samples, reanalyzed for comparison with repeat samples 81-5447, -5793, and -5448. Results of the initial analyses were; 81-1447, 0.18 (4/16/81); 81-1836; 2.7 (5/4/81); 81-3926, 0.124 (9/11/81).

REDACTED

EXP000076
EID713890