Monsanto (Handout) 8/25/75

TABLE IV

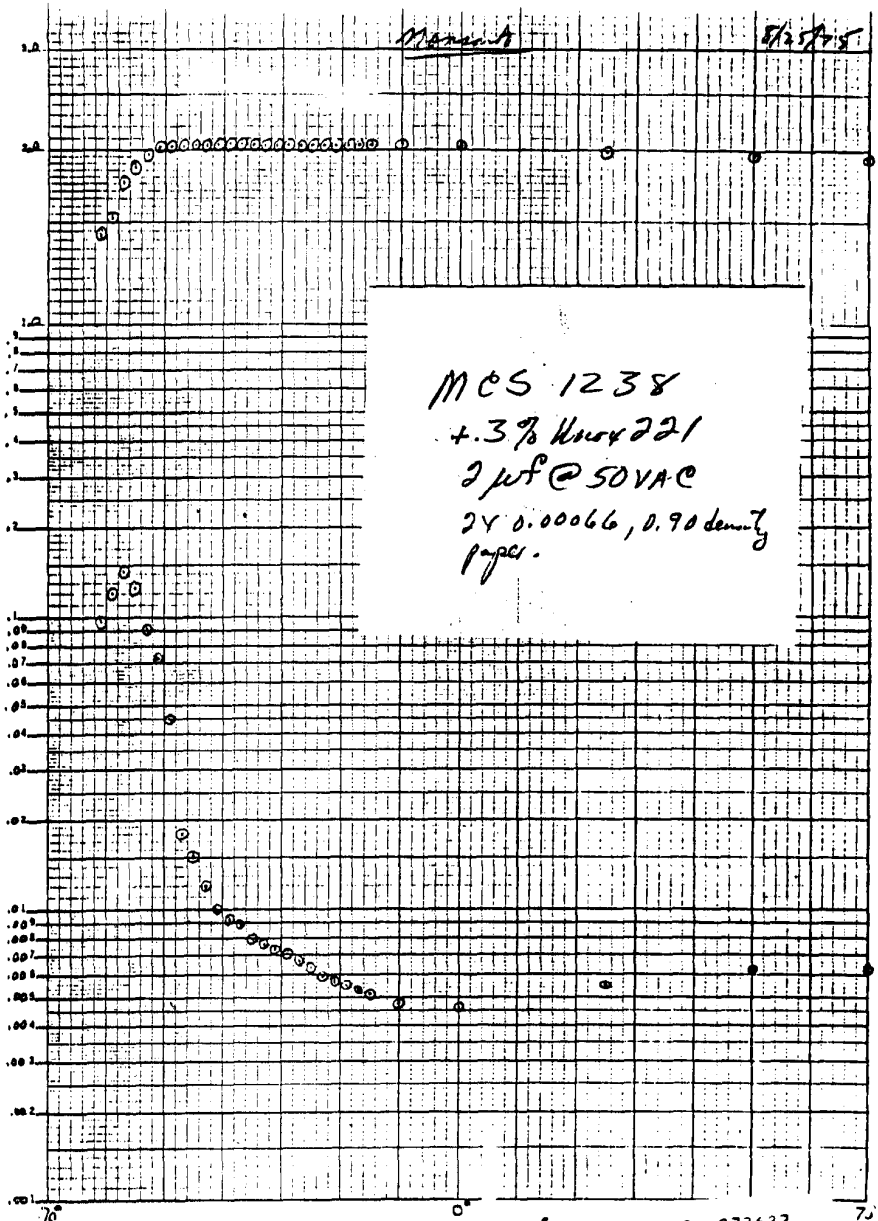
PROPERTIES OF HYDROCARBON BASE DIELECTRIC FLUIDS

Properties	MCS 1238	MCS 1588
	Data on Fluids	
Sp. G. 25/25°C	1.018	1.030
DK 25°C	6.0	6.1
100°C	5.1	5.1
Tan δ 60 Hz 100°C	0.046	0.1
R_s 100°C x 10^9 Ω cm	1,000	620
Viscosity, cs.		
@ 100°F.	9.1	7.14
@ 210°F	1.98	1.96
Flash Point °F.	303°	325°
Fire Point °F	328°	350°
AIT °F.	835°	870°
Hydrolysis**	0.00	0.00
	Data on 2 μF Capacitors* Impregnated with Above Fluids	
Capacitance @ 25°C.	1.97	1.98
Dissipation Factor @ 25°C.	0.0037	0.00361
Capacitance @ 90°C.	1.87	1.87
Dissipation Factor @ 90°C.	0.0039	0.0035
Terminal to Case Resist.	-	51 x 10^9

*Standard 2 μF, 585 VAC Capacitors, 2 layers 0.00066, 0.90 density paper, 0.3% Unox added.

**Neutralization number of sample with 0.5% water added heated for 168 hrs. at 210°F in a stainless steel bomb along with an aluminum and a mild steel coupon.

MONS 072626



Monsanto
8/25/75
MCS 1238
+.3% Knox 221
2 µf @ 50VAC
2X 0.00066, 0.90 density
paper.
Capacitance
Dissipation Factor
Temperature, °C
70°
0°
70

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DIELECTRIC FLUIDS

SEMI-CONTINUOUS ACTIVATED SLUDGE BIODEGRADATION

Product	Biodegradation Rate (%/cycle)
Monochlorobiphenyl	>98
MCS 1043	78
Aroclor 1016	33
Aroclor 1254	15
Pentachlorobiphenyl	~ 0
p,p'-DDT	0
MCS 1238	47
MCS 1588	52
Monoisopropylbiphenyl	98
Diisopropylbiphenyl	26
Santosol 100	
mono-substituted	100
di-substituted	26
Tolylxylylsulfone	23

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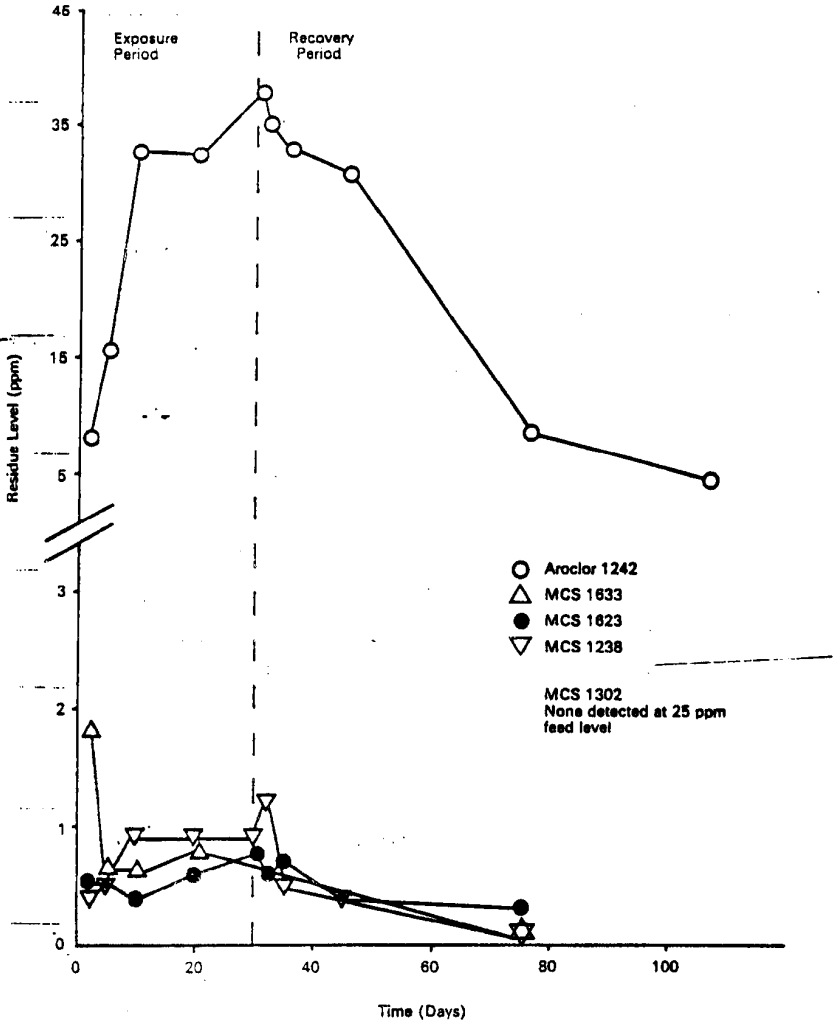
8/25/75

Fat tissue residue level vs time plots comparing Aroclor 1242 and non-PCB type fluids



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