



AR226-0466

To: D. R. RICKER - 53-4N
 From: L. D. WINTER - 236-2B
 Subject: PRE AND POST STUDY ANALYSIS OF T-3141 COC (FC-143) FOR RIKER
 Date: STUDY #0681TB0398

COMMERCIAL CHEMICALS
 ANALYTICAL REPORT #308

3M

 February 5, 1982

Reference: CCD Analytical Request #'s 16474, 16614, 17958

A white powdered solid labeled FC-143 Lot 37 (F-6052 Lot 94) (T-3141 COC) was received originally on October 28 and December 3, 1980 for characterization and analysis. This material was analyzed and used in several studies including the two year feeding study (T-G998COC) Riker Study #0281CR0012. The sample was re-analyzed for post 0681 TB0398 study with sample received from D. Ricker 29 Jan. 82. Sample was 100% solids.

The sample analyzed as follows:

GLC of Methyl Esters

	Pre	Post
C6 Acid	0.2	.2
C7 Acid	0.6	.4
C8 Acid (all isomers)	97.6	98.4
C9 Acid	.8	.4
C10 Acid	.2	.2
Cx Acid	.5	.4

All values within experimental and integration parameters.

Elemental Analysis:

Element	Theo:	Pre	Post
F	66.13	66.2	65.9
C	22.27	22.2	22.2
N	3.24	3.5	3.6
H	0.92	0.7	0.7
O by diff.	7.42	7.4	7.6
F ⁻	0	68 ppm	68 ppm

MW = 431

003111

Spectroscopic

Infrared spectra #16474-1 and 17958-1 are identical and match reference spectra.

NMR spectra H 8386, F 8388-9 (Pre) and F 10163-4 (Post) are identical and match reference spectra. The chain is 79% straight chain, 9% $(CF_3)_2CF-$ branching and 12% back bone branched.

Conclusions

FC-143 Lot 37 has an analysis within specifications, is stable and is representative of commercial material.

M. T. Case - 218-2

LDW/hc

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