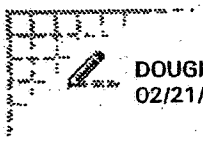

DOUGHTJF
02/21/97 01:39 PM

To: ZIPFEL , PECKSR
cc: ROWANPE , REFSHACJ , CRAWLEPG , SAKSA
Subject: C8 IN FEP

I discussed your request to determine if any C8 was present in FEP sample SMCFEP-14-2 1/30/97 with Paul Rowan.

We decided that the most sensitive approach we could take to obtain data independent of the current GC method would be to heat some of the polymer in the solids probe of the Mass Spec and monitor the gasses evolved.

After measuring the sample we decided a control was needed to determine what would happen to a sample known to contain C8. The sample you provided was "Freeze Dried FEP Wet Cake".

The sample known to have C8 in it evolved C8 at low temperatures. At high temperatures a smaller amount of something that gives a spectra similar to C8 but with the normal 45 mass number peak replaced by 44 was obtained.

The original sample did not evolve any C8 at low temperatures but did show the same C8 like compound at high temperatures.

This suggested the C8 might be present as a salt that was less volatile and decomposed to give carbon dioxide which has a mass of 44. Paul did an analysis of the sodium salt of C8. It showed the higher temperature decomposition and did produce a spectra with the 44 ion however the ratio of the peaks was not quite the same.

Our conclusion is that there may be some C8 in the original sample. If present, it is in a salt form.