

AR226-1668



Gunter Oberdorster <Gunter_Oberdorster@urmc.rochester.edu> on
05/30/2001 03:00:43 PM

To: Rudolph Valentine/AE/DuPont
cc:
Subject: PTFE data

Dear Rudy:

Attached you will find the revised table of the whole-body exposures of rats to PTFE fumes including the information you requested in your e-mail of May 11, 2001, i.e., results of individual rats and their exposure conditions. (Since the data sheet with the individual data is not on this computer, it will either be sent to you from a different computer or we will fax it to you).

All the PTFE exposures were done from the PTFE film that you provided initially. As you can see, one of the rats was a non-responder and another responded low - but all the other rats responded with signs of high toxicity. Whenever the conditions were not right, we did not expose animals, so we don't have a study where we had to discard results.

With respect to a dose-response relationship, we cannot establish this from our data since it is always the same exposure concentration, and only in the initial studies the time was a bit longer. Both protein and PMN data of the BAL are especially well suited to evaluate the response, although it may happen that PMN counts are not as high if the animals die too early post-exposure when the full extent of the response has not been achieved.

With respect to improving the methodology such that exposures may be more relevant for occupational exposures, we could discuss - as we already started to - to have a preset temperature in the tube furnace, introduce a fixed amount of polymer, and start the animal exposures as soon as the particle counts go up.

I look forward to a conference call to discuss the future design of our studies.

Regards - Günter

jh

Attachment  - DuPont.PTFE.tbl_5=30=01.doc

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..... Lung Lavage Data				
N	Exposure	Total Cells x 10 ⁷	% PMN	Protein (mg/ml)

Protein (mg/ml)

				(Mean ± SD)	
5/95	4	5x10 ⁵ /30 min.	0.32±0.09	24.58±15.06	7.77±1.78
12/95	2	1x10 ⁶ /20 min.	1.58	29.48	2.1
3/96	4	5x10 ⁵ /30 min.	1.03±0.19	25.59±37.81	4.68±4.77
5/96	3	5x10 ⁵ /15 min.	2.89±0.77	89.2±4.8	6.90±1.15
6/96	3	5x10 ⁵ /15 min.	0.68±0.09	47.71±21.86	6.31±0.03
11/96	2	5x10 ⁵ /15 min.	1.00	60.48	6.194
11/97	3	5x10 ⁵ /15 min.	1.42±0.24	71.8±17.9	5.30±0.72
12/98	2	5x10 ⁵ /15 min.	1.61	72.22	3.232
*Standardized fumes: as described on attached page					
12/95 - 8/96	11	Sham-exposed	1.46±1.96	0.64±0.57	0.154±0.027

We have additional data for exposures of rats in "nose-only" units. Since exposures to PTFE fumes in "nose-only" units gave inconsistent results (attraction of ultraline particles to plastic cone of headpiece?), we abandoned this technique