

Exhibit 33

1/72/1

J.C. Gage,
Medical Department,

Dr. F.F. Snowden,
Division Toxicological Liaison Officer,
Technical Department,
Billingham Division,
Billingham, Co. Durham.

JCG/CM

13th October, 1958.

THE TOXICITY OF 2,2' DIPYRIDYL

Dear Snowden,

We have studied the toxicity of 2,2' dipyridyl by subcutaneous injection and by application to the eye and skin, and on the basis of this information we are ready to issue a toxicological report. We notice, however, that on your Toxicological Inquiry form you state that there may be exposure to vapour during distillation. It seems to us unlikely that at ordinary temperatures there will be a significant vapour hazard although there may be condensed fumes in the atmosphere if there is a leak during distillation. It is rather difficult to study experimentally a fume of this nature and we doubt whether it would significantly add to our information, but if such fumes are a very probable hazard we would attempt some further investigations in the laboratory.

Dipyridyl appears to have a moderate toxicity mainly by affecting the central nervous system, and it can be absorbed through the skin. If you wish us to investigate the iron complex of this substance, mentioned on your Toxicological Inquiry form, you should send us a sample of it.

Yours sincerely,

(J.C. Gage)