

The average of all the measurements is 350.7, but as the parachor rapidly attains and maintains a mean value of about 351.6, it is evident that *this* should be taken as representative of the compound in question, and the values in the vicinity of the melting point regarded as anomalous. This value, which was quoted in our original paper as the observed parachor of 1-chloro-2,4-dinitrobenzene, is less than 0.5% lower than that calculated from our reëvaluated constants, namely, 353.2, and it would, therefore, seem unnecessary to look further for the cause of the apparent discrepancy.

In the case of the 1-chloro-3,4-dinitro isomer the observed parachors likewise increase rapidly with temperature in the vicinity of the melting point and it seems likely that here also a higher and truer mean value would have been obtained had the measurements been extended to higher temperatures.

EAST GRIMSTEAD
SALISBURY
WILTS, ENGLAND

RECEIVED NOVEMBER 6, 1930
PUBLISHED DECEMBER 18, 1930

S. A. MUMFORD
J. W. C. PHILLIPS

PARACHORS OF ISOMERIC CHLORODINITROBENZENES

Sir:

Through the courtesy of the Editor, we are enabled to add in this issue a few words on the subject of the foregoing interesting note.

In Table V of their cited article, Mumford and Phillips tabulate 361.2 under the caption " Σ At. P." and -8 under the caption σ (or strain constants). Since the strain constants for the nitro group are not referred to until two pages later, we had not understood that these were included in the value 361.2, which we took to be a misprint for 367.2, the value for the sum of atomic and structural constants. The interpretation of the authors is, therefore, very welcome.

The reason we made our measurements in the temperature range 40-60° was because this was the range used by Müller, whose enormous discrepancy it was our primary purpose to examine.

In comparing the results of Jaeger for the other isomer, we thought it fairest to use the portion of his temperature range closest to 40-60°; and, because we noticed that there was an apparent drift of this parachor with temperature, we corrected the value for drift in order to make the best possible comparison. When a parachor exhibits such drift, the best criterion for its absolute value is, of course, debatable.

DEPARTMENT OF CHEMISTRY
PRINCETON UNIVERSITY
PRINCETON, NEW JERSEY
RECEIVED NOVEMBER 14, 1930
PUBLISHED DECEMBER 18, 1930

D. V. SICKMAN
ALAN W. C. MENZIES