

HEAT OF FORMATION OF NITROGEN
TRICHLORIDE

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(ABSTRACT)

A determination of the heat of formation of nitrogen trichloride was made by Troost and Hautefeuille more than fifty years ago, but the method which was used in making the determination was not described and no one has attempted to repeat the work. A few years ago the author found that the reaction between nitrogen trichloride and hydrochloric acid gives ammonium chloride and chlorine and is quantitative, and may be carried out in an anhydrous solution of nitrogen trichloride in carbon tetrachloride. This reaction has now been made the basis for a determination of the heat of formation of the compound and a value of about -54000 calories has been found.