

Absorption of Nitric Oxide in Gas Analysis.

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It is well known that the vapour tension of nitric oxide, dissolved in the solution of a ferrous salt, interferes with the use of this reagent to remove nitric oxide from other gases. There is, however, another absorbent for nitric oxide which leaves nothing to be desired, whose use and value have remained unknown. This is a strong solution of either sodium or potassium sulphite, to which a little alkali hydroxide is added. It quickly absorbs every trace of nitric oxide, which it fixes in the form of hyponitrososulphate, $\text{Na}_2\text{N}_2\text{O}_2\text{SO}_3$. I have already made satisfactory use of it to analyse the mixture of nitric oxide and nitrogen which is left on heating silver hyponitrite and letting the solid and gaseous products cool in contact with each other. The sulphite need not be very pure, the presence of sulphate or carbonate being of no importance. If carbon dioxide or other acid gas is present with the nitric oxide, it is removed by alkali, before using the sulphite reagent.

