

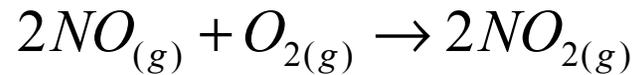
Oxidation of NO in Sample Bags to Yield NO₂

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Poster Location Number P-18



NO Oxidation Reaction



$$\frac{d[NO]}{dt} = k[NO]^2[O_2]$$

$$[NO]_t = \frac{[NO]_o}{1 + 2[NO]_o[O_2]kt}$$

- At initial NO concentrations above 20 ppm, the reaction proceeds very rapidly.
- Time to 10% loss
 - 6.5 min for 50 ppm
 - 13 min for 20 ppm
 - 32.5 min for 10 ppm

