ADDITIONS AND CORRECTIONS

2001, Volume 105

Christopher D. Zangmeister and Jeanne E. Pemberton*: Raman Spectroscopy of the Reaction of Sodium Chloride with Nitric Acid: Sodium Nitrate Growth and Effect of Water Exposure.

Pages 3788−3795. We recently reported the reaction probability γ for the reaction between NaCl and gas-phase HNO_3 as $(5.9 \pm 0.8) \times 10^{-2}$ on the basis of monitoring the growth of surface $NaNO_3$ with Raman spectroscopy. This determination used an assumed value for the NaCl surface area based on size dimensions determined from scanning electron microscopy of the NaCl particles. Using BET analysis, we have recently determined the assumed surface area to be in error and additionally found an error in our original calculations. Using the BET surface area, the correct value of the reaction probability γ is $(8.7 \pm 1.4) \times 10^{-5}$.

Acknowledgment. We thank Professor Barbara J. Finlayson-Pitts of the University of California at Irvine for pointing out the discrepancy between our original value for γ and values for γ determined recently in other laboratories.

10.1021/jp0214357
Published on Web 12/05/2003

2003, Volume 107A

Stefan Fau, Kenneth J. Wilson, and Rodney J. Bartlett*: On the Stability of $N_5^+N_5^-$

p 4639. A mistake was brought to our attention. Under standard conditions, the dissociation of hydrazine into NH_3, $^1/_2N_2$, and $^1/_2H_2$ yields 1.05 kcal/g.[1] Optimal dissociation into $^4/_3NH_3$ and $^1/_3N_2$ yields 1.17 kcal/g. This affects the sections Relative Enthalpies and Energy Densities and Summary and Conclusions. Crystalline $N_5^+N_5^-$ is predicted to have ∼1.7 times[2] the maximum energy density of hydrazine in kilocalories per gram and 3.1−3.4 times its maximum energy density in kilocalories per cubic centimeter.[3]

(1) Afeefy, H. Y.; Liebman, J. F.; Stein, S. E. Neutral Thermochemical Data. In *NIST Chemistry WebBook*; Linstrom, P. J., Mallard, W. G., Eds.; NIST Standard Reference Database Number 69; National Institute of Standards and Technology: Gaithersburg, MD, July 2001 (http://webbook.nist.gov).

(2) We compute the energy density of crystalline $N_5^+N_5^-$ as 1.93−2.07 kcal/g depending on the estimated lattice enthalpy (120−140 kcal/mol).

(3) Schmidt, E. W. *Hydrazine and its Derivatives − Preparation, Properties, Applications*; John Wiley & Sons: New York, 1984.

10.1021/jp036568m
Published on Web 12/06/2003