doi:10.1351/goldbook.G02597

Gaussian band shape

A band shape described by the Gaussian function:

$$F(\nu - \nu_0) = \frac{a}{\sqrt{\pi}}\, \mathrm{e}^{-a^2 (\nu - \nu_0)^2}$$

In this equation, a^{-1} is proportional to the width of the band, and ν_0 is the frequency of the band maximum.
See also: Lorentzian band shape

Source:
PAC, 1996, *68*, 2223 *(Glossary of terms used in photochemistry (IUPAC Recommendations 1996))* on page 2244

See also:
PAC, 1990, *62*, 2167 *(Glossary of atmospheric chemistry terms (Recommendations 1990))* on page 2192

 Copyright © 2014 IUPAC