

TABLA A-15* Variación de \bar{c}_p con la temperatura, para varios gases ideales.

| Gas | α | $\beta \times 10^{-3}$ | $\gamma \times 10^{-6}$ | $\delta \times 10^{-9}$ | $\epsilon \times 10^{-12}$ |
|---------------------------------|----------|------------------------|-------------------------|-------------------------|----------------------------|
| CO | 3.710 | -1.619 | 3.692 | -2.032 | 0.240 |
| CO ₂ | 2.401 | 8.735 | -6.607 | 2.002 | 0 |
| H ₂ | 3.057 | 2.677 | -5.810 | 5.521 | -1.812 |
| H ₂ O | 4.070 | -1.108 | 4.152 | -2.964 | 0.807 |
| O ₂ | 3.626 | -1.878 | 7.055 | -6.764 | 2.156 |
| N ₂ | 3.675 | -1.208 | 2.324 | -0.632 | -0.226 |
| Air | 3.653 | -1.337 | 3.294 | -1.913 | 0.2763 |
| SO ₂ | 3.267 | 5.324 | 0.684 | -5.281 | 2.559 |
| CH ₄ | 3.826 | -3.979 | 24.558 | -22.733 | 6.963 |
| C ₂ H ₂ | 1.410 | 19.057 | -24.501 | 16.391 | -4.135 |
| C ₂ H ₄ | 1.426 | 11.383 | 7.989 | -16.254 | 6.749 |
| Gases monoatómicos ^a | 2.5 | 0 | 0 | 0 | 0 |

^a Para gases monoatómicos como el He, Ne y Ar, \bar{c}_p es constante en un amplio rango de temperaturas y aproximadamente igual a $5/2 R$.

Fuente: Adaptado de K. Wark, *Thermodynamics, 4th ed.*, McGraw-Hill, New York, 1983, basado en NASA SP-273, U.S. Government Printing Office, Washington, DC, 1971.

* Nota: Adviértase que el punto (.) separa la parte entera de la decimal.