

**FORMULA 2.322.4**

$$\int x^4 e^{ax} dx = e^{ax} \left( \frac{x^4}{a} - \frac{4x^3}{a^2} + \frac{12x^2}{a^3} - \frac{24x}{a^4} + \frac{24}{a^5} \right)$$