

SPECIFICATION

Thiamine

Parameters	Specification
Appearance	White crystalline powder
Molecular Formula	C ₁₂ H ₁₇ N ₄ OS ⁺
Molecular Weight	265.37 g/mol
Boiling Point	328 °C
Melting Point	128 °C
Flash Point	140 °C
Purity	98–99%
Refractive Index	1.60
Solubility	Soluble in water; soluble in ethanol; insoluble in nonpolar solvents
Uses	Vitamin B1 supplement; fortification of foods; cofactor in carbohydrate metabolism (thiamine pyrophosphate) and nervous system function; pharmaceutical additive