



江苏兄弟维生素有限公司

JIANGSU BROTHER VITAMINS CO., LTD.

MARINE ECONOMIC DEVELOPMENT ZONE, DAFENG DISTRICT, YANCHENG CITY,
JIANGSU PROVINCE, 224145 CHINA

www.brother.com.cn

Thiamine Hydrochloride Specification

Product Name		CAS No.	EINECS No	
Thiamine Hydrochloride		67-03-8	200-641-8	
Characteristics		White or almost white, crystalline powder or colourless crystals.		
Molecular Formula		C ₁₂ H ₁₈ Cl ₂ N ₄ OS		
Molecular Weight		337.27		
Specifications	Identification	physical and chemical	Meet the requirement	
		IR	Keep conformity with the standard	
	Melting point		—	Melts at about 248°, with some decomposition.
	Solubility		Soluble in water, soluble in glycerol, slightly soluble in ethanol (96%), almost insoluble in heptane	Freely soluble in water; soluble in glycerin; slightly soluble in alcohol; insoluble in ether and in benzene.
	Assay, %		98.5-101.0	98.0-102.0
	pH		2.7-3.3	2.7-3.4
	Absorbance of Solution, %		—	≤0.025
	Color and Clarity of Solution		Clarification, color is not deep in Y7 or GY7 contrast solution	—
	Nitrate		—	No brown ring at the junction of two layers
	Sulfates		≤300ppm	—
	Loss on Drying, %		—	—
	Water, %		≤5.0	≤5.0
	Residue on Ignition, % (Sulfated ash, %)		≤0.1	≤0.2
	Related substances	Impurity A, %	≤0.15	—
		Impurity B, %	≤0.3	—
		Impurity C, %	≤0.15	—
		Unspecified Impurities (for each impurity), %	≤0.1	—
Total, %		≤0.5	≤1.0	
Residual Solvent, ppm		—	≤3000	
Additional Specifications	Bulk Density	Loose, g/cm ³	0.2 - 0.3	
		Tapped, g/cm ³	0.3 - 0.4	
	Particle Size	100mesh, %	100	
Packaging		25 kg carton/drum, 20 cartons/drums per pallet, 500kg per batch		
Applications		Nutritional vitamin		