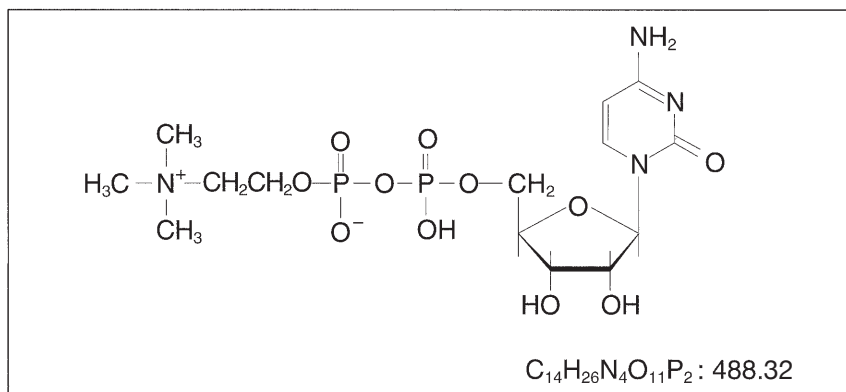


CITICOLINE

CAS NO. 987-78-0

MOLECULAR STRUCTURE AND FORMULA



DESCRIPTION

White crystalline powder
Odorless

IDENTIFICATION

Compare the infrared absorption spectrum of sample with that of the standard by ATR method.

SPECIFICATION AND PROCEDURE

State of solution	Colorless and clear	Visual test 12.5%, H ₂ O
pH	2.5 ~ 3.5	Sec.-26, 1%
Ammonium (NH ₄)	Not More Than 0.05%	Sec.-3-(1), 0.20g 10.0 ml of Standard solution
Heavy metals (Pb)	Not More Than 10 ppm	Sec.-7-(1), 2.0 g 2.0 ml of Standard solution
Arsenic (As ₂ O ₃)	Not More Than 2 ppm	Sec.-8-(3), 1.0 g 2.0 ml of Standard solution
Free phosphoric acids	Not More Than 0.1%	Sec.-37
5'-Cytidylic acid	Not More Than 1.0%	Sec.-38
Loss on drying	Not More Than 5.0%	Sec.-9-(3), 0.5 g 100°C, 4hr, P ₂ O ₅ (reduced press.)
Endotoxin*	Less Than 50.0 EU/g	Sec.-34-(2), 0.5 g/100 ml
Purity (dry basis)	Not Less Than 98.0%	Sec.-36

* The endotoxin-certified grade will be supplied on request.

STORAGE

Controlled room temperature in tight container