



AnMar International Ltd.

540 Barnum Avenue
PO Box 2343
Bridgeport, CT 06608

Tel: 203-336-8330

Fax: 203-336-5508

www.anmarinternational.com

**SPECIFICATION SHEET
Citicoline (Pharmaceutical Grade)**

Item No.: 131

Country of Origin: China

Updated: June 2012

CAS No.: 987-78-0

TEST ITEMS

SPECIFICATIONS

Appearance

White crystalline powder

Identification

1. Chemical Reaction

To have a positive reaction

2. TLC

The retention time of a major

peak meets the requirements

3. IR

Consistent with the spectrum

obtained with reference substance

pH

2.5 – 3.5

Clarity & Color of Solution

Clear and colorless

Ammonium

≤0.05%

Phosphate

≤0.1%

5`-CMP

≤0.5%

Loss on drying

≤5.0%

Dry content (C₁₄H₂₆N₄O₁₁P₂)

≥98.0%

Heavy Metals

≤10 ppm

Arsenic (As)

≤2 ppm

Microbiology:

Total aerobic plate count

≤1,000 cfu/g

Yeast & Mold

≤100 cfu/g

E. coli

Negative

Packing:

In drums of 25 kgs net

Storage:

Store at ambient temperature in a well-closed container

Shelf Life:

2 years under normal storage conditions



Gayathri Vasudevan

Manager, Quality Assurance & Regulatory