

# Niacinamide

Cell Culture Tested

**Product Code: TC154**

## Product Description :

Molecular Weight: 122.12

Molecular Formula:  $C_6H_6N_2O$

CAS No.: 98-92-0

Synonym: Nicotinamide, Nicotinic acid amide, Pyridine-3-carboxylic acid amide, Vitamin B3, Vitamin PP

Niacinamide, also known as nicotinamide is a water soluble vitamin belonging to vitamin B group.

Niacinamide acts as a precursor for energy cofactors such as nicotinamide adenine dinucleotide (NAD), nicotinamide adenine dinucleotide phosphate (NADP) and their reduced forms NADH and NADPH. These moieties act as essential coenzymes in ATP production and as the substrates for nuclear enzyme poly-ADP-ribose polymerase-1 (PARP-1).

It is one of the several vitamins essential for cell proliferation. It is used as a major component in wide range of cell culture media including classical and serum-free media. Niacinamide is also involved in protecting the cultured cells from carcinogenesis, DNA repair, and genomic instability.

## Directions :

### Preparation instructions:

Niacinamide is soluble in water.

## Quality Control:

### Appearance

White crystalline powder.

### Solubility

Clear colorless solution at 5gm in 100ml of water

### pH of 5% solution in water

6.00 -7.50

### Chloride (Cl)

NMT 0.025%

### Sulphate (SO<sub>4</sub>)

NMT 0.0125%

### Sulphated ash

NMT 0.1%

### Heavy metals

NMT 0.003%

### Loss on drying

NMT 0.5%

### Assay

98.50 -101.50%

### Cell Culture Test

Passes

## Storage and Shelf Life:

Store at 10-30°C away from bright light.

Shelf life is 36 months.

Use before expiry date given on the product label.

## Disclaimer :

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