NICOTINAMIDE RIBOSIDE CHLORIDE (NRCL)

PRODUCT IN FOCUS



Nicotinamide Riboside Chloride (NRCL)

INTRODUCTION

Nicotinamide riboside chloride (NRCL) is a unique form of vitamin B₃. As a precursor to nicotinamide adenine dinucleotide (NAD+), a crucial coenzyme involved in various cellular processes, it has sparked interest in the realms of aging, metabolism, and overall cellular health.

MANUFACTURE

It is synthesized by reacting nicotinamide and ribose in a controlled environment to obtain nicotinamide riboside which is subsequently converted to its chloride form by reacting it with hydrochloric acid.

Synonym	3-(aminocarbonyl)-1-β-D-ribofuranosyl-pyridinium, monochloride
CAS no.	23111-00-4
EINECS no.	807-820-5
Molecular formula	C ₁₁ H ₁₅ CIN ₂ O ₅
Molecular weight	290.7
Structure	HO OH ONH2

APPLICATIONS

- It is a form of vitamin B₃ (Niacin) and is marketed as a dietary supplement
- It is being explored for its potential therapeutic applications in pharmaceuticals, including the treatment of metabolic disorders and neuro degenerative diseases
- It may also find applications in the cosmetics industry for its potential anti-aging properties and skin health benefits
- It is used as a research tool in scientific studies investigating its effects on metabolism, aging, and various health conditions

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SPECIFICATIONS

Test	Unit	Specifications
Appearance	-	White to off-white powder
Identification by HPLC	-	The retention time should match with the standard
Purity	%	≥ 99.0
Nicotinamide	%	≤ 1.0
Single unidentified impurity	%	≤ 0.5
Heavy Metals	ppm	≤ 20
Residue on ignition	%	≤ 0.5
Ethanol	ppm	≤ 5000
Methanol	ppm	≤ 1000
ACN	ppm	≤ 100
Water content	%	≤ 1.0
Loss on drying	%	≤ 0.5
Assay	%	98.0-102.0
Aerobic bacterial count	CFU/g	≤ 750
E. Coli	MPN/g	≤ 30

STORAGE

Store in dry, dark place at temperature between 2 - 8°C, avoid direct sunlight

PACKING

HDPE drums

REACH Status

Not registered

ExSyn offers Nicotinamide Riboside Chloride (NRCL) on commercial scales and welcomes enquiries. No matter the quantity you need, our exceptional quality and service will make ExSyn your supplier of choice! If you need any additional information or SDS, please contact us.