

GMP Solution

ICH-Q7 GMP Manufactured Product

Urea (6M) Solution, GMP Excipient Grade

MADE WITH USP/EP GRADE UREA AND WATER FOR INJECTION

INTENDED FOR USE AS AN EXCIPIENT GRADE SOLUTION

Urea is used as a protein denaturant with low UV absorptivity. In addition to increasing solubility of hydrophobic molecules, unfolding proteins and altering their three-dimensional structures, Urea also renatures protein structures. BioSpectra manufactures repurified, GMP Urea. This multi-compendial certified Urea crystal is combined with WFI grade water to manufacture the finished 6M Urea Solution.

 H_2N C NH_2

CAS #: 57-13-6

Molecular Formula: CH_4N_2O 360 grams per Liter Urea pH of a 6M soln., 25°C = 7-10

Lead Time: 3-months

Minimum Order Quantity: 4000L

BIO EXCIPIENT GRADE | Product Code: UREA-3120

CH₄N₂O • 360 g/L • CAS# 57-13-6



These are general specifications. BioSpectra will customize our products to meet your quality based requirements.

ANALYSIS		SPECIFICATIONS	
Appearance		Colorless Liquid	
Identification (IR)		Conforms to Standard	
Molarity		5.8 – 6.2 M	
pH @ 25°C		7 - 10	
Trace Metals	Arsenic (As)	≤ 5 ppm	
	Copper (Cu)	≤ 5 ppm	
	Iron (Fe)	≤ 5 ppm	
	Lead (Pb)	≤ 5 ppm	

<u>MANUFACTURING STATEMENT:</u> Manufactured using Urea raw material purified (in process) to Meet USP/EP compendial specifications.

GMP Compliance:

Bio Excipient Grade Urea 6M solution, UREA-3120 is suitable for use as an excipient. It is manufactured in accordance with the ICH-Q7 Good Manufacturing Practice Guide. This grade of Urea 6M solution is not suitable to be used as an Active Pharmaceutical Ingredient, Drug Product or Household Item.



Quality Assurance / Regulatory Support / Quality Control

BIOSPECTRA Key Compliance Attributes of BioSpectra Grades	Bio Excipient Grade ICH-Q7 Compliant Manufactured
Suitable for Research and Diagnostic	✓
Each Batch 100% Analyzed	✓
Management of Change	✓
Validated Analytical Methods	✓
Compendial Testing	✓
Trace Metals Analyzed	✓
Stability Testing Program	✓
BioSpectra Supply Chain Audit Trail	✓
Product Origin Statement	✓
Customer Quality Audits	✓
Validated Manufacturing Process	✓
US Manufactured at BioSpectra	✓
IPEC cGMP Compliant Manufactured	✓
Customized Additional Specifications	✓
Multi-Compendial Testing	✓
Low Bioburden Low Endotoxin (LBLE)	✓
Enzyme Tested	✓
Suitable for use as Excipient	✓
Microbial / Endotoxin Tested	✓
Manufactured in FDA Registered Facility	√
Customized Manufacturing Schedule	√
Custom Regulatory Packet Accelerated Stability	V
Video Conference access to BioSpectra Sites	✓
Complete access to Product Traceability	· ✓
Access to Supply Chain Information	✓
ICH-Q7 Qualified Utilities	✓
ICH-Q7 Compliant Manufactured	✓
Type IV Drug Master File	✓

✓ indicates an attribute or level of compliance which is granted or available based on the purchase of the product grade.

Bio Excipient Grade: Intended for use as ICH-Q7 Compliant Excipient

LBLE: LBLE applies when product specifications include requirements for Bioburden Testing (TAMC/TYMC and/or Endotoxin).

LBLE stands for Low Bioburden, Low Endotoxin non-sterile products suitable for further use in parenteral manufacturing and other sterile applications.

General Product Description:

The manufacturing of Bio Excipient Grade Urea 6M soln., UREA-3120 is performed at BioSpectra's Bangor, PA facility and is conducted in a multi-purpose processing area using multi-purpose equipment.

- Urea 6M solution is a colorless liquid.
- Molecular Formula: CH₄N₂O
- Molecular Weight: 60.06 g/mol.
- 6M solution: 360 g/liter
- pH: 7-10
- CAS Number: 57-13-6.
- There are no known major food allergens (as defined by FDA and WHO) in the manufacture of this product.
- BioSpectra certifies that all Urea 6M solution, UREA-3120 manufactured at BioSpectra and its raw materials are not derived from or come in contact with animal parts, products, and/or byproducts.
- Urea 6M solution manufactured at BioSpectra and any raw materials used in the manufacture of Urea at BioSpectra are not subject to genetic modification.
- Manufactured with WFI water.
- Synonyms: Carbamide Solution, Carbonyl Diamide Solution

Retest Date:

The recommended retest period for Urea 6M solution is two years from the date of manufacture.

Storage and Shipping Conditions:

Store in a tightly closed container. Store in dry, well-ventilated area with temperature between 15-30° C. Store away from incompatible substances.

Package Sizes:

200 Liter drums, 1,000 - 1,200 L totes.

