

NTP Powder Specifications

	ATP Disodium Salt x 3 H ₂ O	CTP Disodium Salt x 3 H ₂ O	GTP Disodium Salt x 3 H ₂ O	UTP Trisodium Salt x 3 H ₂ O
Nomenclature	Adenosine 5'-triphosphate	Cytidine 5'-triphosphate	Guanosine 5'-triphosphate	Uridine 5'-triphosphate
CAS Number	987-65-5	36051-68-0	36051-31-7	19817-92-6
Formula	C ₁₀ H ₁₄ N ₅ Na ₂ O ₁₃ P ₃ x 3 H ₂ O	C ₉ H ₁₄ N ₃ Na ₂ O ₁₄ P ₃ x 3 H ₂ O	C ₁₀ H ₁₄ N ₅ Na ₂ O ₁₄ P ₃ x 3 H ₂ O	C ₉ H ₁₂ N ₂ Na ₃ O ₁₅ P ₃ x 3 H ₂ O
Formula Weight (g x mol⁻¹)	605.18	581.16	621.18	604.12
Storage	at -20 °C	at -20 °C	at -20 °C	at -20 °C
Stability	24 months	24 months	24 months	24 months
Appearance	white powder	white powder	white powder	white powder
A_{250 nm} / A_{260 nm} (22 °C, pH 7.0)	0.78 ± 0.03	0.82 ± 0.03	1.15 ± 0.04	0.74 ± 0.03
A_{280 nm} / A_{260 nm} (22 °C, pH 7.0)	0.15 ± 0.02	0.97 ± 0.03	0.67 ± 0.03	0.38 ± 0.02
NTP (HPLC area)	≥ 98.0%	≥ 95.0%	≥ 90.0%	≥ 90.0%
NDP (HPLC area)	≤ 1.0%	≤ 2.0%	≤ 5.0%	≤ 5.0%
in vitro Transcription (T7 RNA polymerase, 1423 bp template)	visible RNA fragment after 5 min incubation	visible RNA fragment after 5 min incubation	visible RNA fragment after 5 min incubation	visible RNA fragment after 5 min incubation
DNases, RNases, Nicking Activity	not detectable	not detectable	not detectable	not detectable
Proteases	not detectable	not detectable	not detectable	not detectable