

NTP Powder Specifications

	ATP - Solid	CTP - Solid	GTP - Solid	UTP - Solid
Nomenclature	Adenosine 5'-triphosphate, sodium salt	Cytidine-5'-triphosphate, sodium salt	Guanosine 5'-triphosphate, sodium salt	Uridine 5'-triphosphate, sodium salt
CAS Number	987-65-5	36051-68-0	36051-31-7	19817-92-6
Formula (free acid)	$C_{10}H_{16}N_5O_{13}P_3$	$C_9H_{16}N_3O_{14}P_3$	$C_{10}H_{16}N_5O_{14}P_3$	$C_9H_{15}N_2O_{15}P_3$
Formula Weight (free acid, g x mol⁻¹)	507.18	581.16	523.18	484.14
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