

## Tetracycline HCI EP9

Batch no 231108-4 Mf date Nov 10 2023 Exp date Nov 09 2028

Batch size

size 1-, 162. 6 kg

Molecular Structure

Molecular Formula  $C_{22}H_{24}N_2O_8$  HCI

Molecular Weight 480.90 CAS Registry Number 64-75-5

Apr 29 202

<u>Tests</u>	<u>Specifications</u>			Results
Appearance	Yellow crystalline powder			Conforms
Solubility	Soluble in water, slightly soluble in practically insoluble in acetone.	eth	anol (96%),	Conforms
Identification	TLC, color reaction, reaction of chlo	ride		Positive
рН	1.8 ~ 2.8			2. 3
Specific optical rotation	-240 ~ -255°			-247°
Loss on drying	≤ 2.0%			0.4%
Heavy metals	≤ 50 ppm			Conforms
Sulfated ash	≤ 0.5%			< 0.1%
Related substances	4-Epitetracycline	$\leq$	3.0%	0.83%
	4-Epianhydrotetracycline	$\leq$	0. 5%	ND
	Anhydrotetracycline	$\leq$	0.5%	0. 13%
	2-Acetyl-2-decarbamoyltetracycline	<u>&lt;</u>	1.5%	0. 51%
Residual solvents (GC)	Acetone	<	100 ppm	5 ppm
	N-Butanol	<	3000 ppm	1324 ppm
Assay (odb)	95.0 $^{\sim}$ 102.0% of $C_{22}H_{24}N_2O_8$ HC I			99.4%

Packaging & storage	Preserve in tight, light-resistant containers	
Conclusion	Material complies with EP9.0	

