

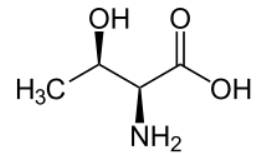
# L-THREONINE

## USP 39

PARAMETER	LIMIT
Appearance: White crystalline powder	passes
Identity	passes
pH-value (5.0 % (m/V) in H <sub>2</sub> O at 25°C)	5.0 to 6.5
Specific optical rotation (on dry basis) (6.0 % (m/V) in H <sub>2</sub> O at 25°C [ $\alpha$ ] <sub>D</sub> <sup>25</sup> )	-29.1° to -26.7°
Ninhydrin-positive substances (TLC)	passes
Chlorides	≤ 500 ppm
Sulphates	≤ 300 ppm
Iron	≤ 30 ppm
Heavy metals (as Pb)	≤ 15 ppm
Loss on drying	≤ 0.2 %
Residue on ignition	≤ 0.4 %
Assay (on dry basis)	98.5 to 101.5 %
Residual solvents	passes
Total viable aerobic count	≤ 100 CFU/g
Moulds and yeasts	≤ 10 CFU/g
Salmonella	In 10 g n.d.
<i>Escherichia coli</i>	In 10 g n.d.
<i>Pseudomonas aeruginosa</i>	In 10 g n.d.
<i>Staphylococcus aureus</i>	In 10 g n.d.

### CHEMICAL DATA

Formula: C<sub>4</sub>H<sub>9</sub>NO<sub>3</sub>  
CAS Number: 72-19-5



### PACKAGING

25 kg Unit  
Outer container: Fiber drum  
Outer liner: HDPE  
Inner liner: LDPE

### STORAGE

Dry and dark at room temperature in tightly closed container

### STABILITY

Product is stable for 4 years from date of production if stored under recommended conditions in original packaging.