

PRODUCT SPECIFICATION

L-Cystine

CAS No.:	[56-89-3]
Molecular Formula:	$C_6H_{12}N_2O_4S_2$
Nitrogen:	11.66%
Molecular weight:	240.30

L-Cystine, when dried, contains not less than 98.5 percent and not more than 101.0 percent of L-Cystine ($C_6H_{12}N_2O_4S_2$).

DESCRIPTION:

White crystals or crystalline powder, tasteless. Practically insoluble in water, in ethanol and in ether. Dissolves in dilute hydrochloric acid.

IDENTIFICATION:

Compare the infrared absorption spectrum of the sample with that of the standard by potassium bromide disc method.

SPECIFICATIONS

Specific rotation $[a]_D^{20}$ (C=2, 1mol/L HCl)	:	-218 to -224°
State of solution (Transmittance)	:	Colorless and clear (T% > 95%)
Chloride (Cl)	:	Not more than 0.020%
Sulfate (SO ₄)	:	Not more than 0.020%
Ammonium (NH ₄)	:	Not more than 0.02%
Heavy metals (as Pb)	:	Not more than 10ppm
Iron (Fe)	:	Not more than 10ppm
Arsenic (as AS ₂ O ₃)	:	Not more than 1ppm
Other amino acids (TLC)	:	Conforms
Loss on drying (105°C, 3 hrs.)	:	Not more than 0.20%
Residue on ignition (as sulfate)	:	Not more than 0.10%
Assay	:	98.5% ~ 101.0%
pH	:	5.0 to 6.5
Pyrogen	:	Non-pyrogenic