## Chem-Impex International, Inc.

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## Certificate of Analysis

Catalogue Number	29770
Lot Number	000424-170204-13108
Product	D-Cysteine ethyl ester hydrochloride
	D-Cys-OEt·HCl
CAS Number	75521-14-1
Molecular Formula	$C_5H_{11}NO_2S \cdot HCl$
Molecular Weight	185.7
Appearance	White powder
Solubility	Clear solution (0.3 g in 2 mL Water)
Melting Point	124.7 - 125.4 °C
Water Content (Karl Fisher)	4.978%
Optical Rotation	[a] <sub>D</sub> <sup>20</sup> = +12.6° (C=1 in 1N HCl)
Infrared Spectrum	Conforms to structure
Analysis by Mass Spectra	Conforms to standard
Loss on Drying	0.30% (40 °C, 2h)
H NMR	Conforms to structure
Purity by HPLC	98.86%
Storage	Store at 0-8 °C

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Remarks

See material safety data sheet for additional information

For laboratory use only

The foregoing is a copy of the Certificate of Analysis as provided by our supplier

letumer.

Bala Kumar Quality Control Manager