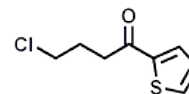


Certificate of Analysis

Date of Manufacture: 2012-11-15 Date of Analysis: 2012-11-15
Batch No: 12028-003-5

Catalog No.: HT21384
Product Name: 4-Chloro-1-(thiophen-2-yl)butan-1-one
Formula: C₈H₉ClOS
Molecular Weight: 188.67
CAS Number: 43076-59-1



Items	Specifications	Results of Analysis
Appearance:	Colorless to brown liquid	Brown liquid
¹ H-NMR:	Consistent with structure	Consistent with structure
Assay (HPLC):	95.0%min	96.7%
Water Content:	≤0.5%	0.15%

Storage: Room Temperature, Dry
Origin of Country: P. R. China