

QC Tests for Lots.

Category	Method	Description
Base Silica-Gel	SEM	Sphericity and Surface Smoothness by Scanning Electron Microscopy
	Ph	Particle Size Uniformity by Nitrogen Adsorption, Laser Ray Particle Analyzer
	M	Metals by Atomic Emission and ICP
	Ph	Particle Size, Surface Area, Pore Diameter and Pore Volume. by Nitrogen Adsorption, Laser Ray Particle Analyzer
Chemical Bonding	C	Carbon Load by Elementary Analysis
	Si NMR	Residual Silanol by Si-NMR
	Schro	Residual Silanol by Chromatographic test
Selectivity of Packings	T	Hydrophobicity Tanaka Test Mixture
	T	Stereoselectivity Tanaka Test Mixture
	T	Hydrogen-bonding capability Tanaka Test Mixture
Inertness of Packings	Py	Inertness to Basic compounds Pyridine
	Am	Inertness to Basic compounds Ethylaniline, Benzylamine, Aminopyridine
	Ac	Inertness to Acidic compounds Formic Acid, Acetic Acid
	Cu	Inertness to Complexes Oxine-Copper
Durability of Packing	D	Durability to Low pH mobile phase at pH 2.0
	D	Durability to High pH mobile phase at pH 9.0

Column Performance Tests for Individual Columns

Column Efficiency	CP	Theoretical Plates	In compliance with USP
	CP	Peak Symmetry	In compliance with USP
The Others	CP	Retention	
	CP	Column Back Pressure	

QC Tests Employed for Phases

Packing	SEM	M	Ph	C	Si NMR	Schro	T	Py	Am	Ac	Cu	D	CP	V
(Inertsil® 3 Series)														
Inertsil® ODS-3	⊙	⊙	⊙	⊙	○	⊙	⊙	⊙	⊙	⊙	⊙	○	⊙	
Inertsil® ODS-3V	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	○	⊙	⊙
Inertsil® ODS-P	⊙	⊙	⊙	⊙									⊙	
Inertsil® C8-3	⊙	⊙	⊙	⊙	○	⊙	⊙	⊙	⊙	⊙	⊙	○	⊙	
Inertsil® Ph-3	⊙	⊙	⊙	⊙			⊙	⊙	⊙	⊙	⊙	○	⊙	
Inertsil® CN-3	⊙	⊙	⊙	⊙			⊙	⊙				○	⊙	
Inertsil® NH2	⊙	⊙	⊙	⊙									⊙	
Inertsil® SIL-100A	⊙	⊙	⊙										⊙	
(Inertsil® 2 Series)														
Inertsil® ODS-2	○	○	⊙	⊙		⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	
Inertsil® C8	○	○	⊙	⊙		⊙	○	⊙	○	○	○	⊙	⊙	
Inertsil® C4	○	○	⊙	⊙		⊙	○	⊙	○	○	○	⊙	⊙	
Inertsil® Ph	○	○	⊙	⊙		⊙	○	⊙	○	○	○	⊙	⊙	
Inertsil® SIL-150A	○	○	⊙										⊙	
(The other Inertsil® columns)														
Inertsil® ODS-80A	○		⊙	⊙		⊙		⊙					⊙	
Inertsil® PREP-ODS			⊙	⊙		⊙		⊙				⊙	⊙	
Inertsil® PREP-C8			⊙	⊙		⊙		⊙				⊙	⊙	
Inertsil® PREP-SIL			⊙										⊙	
Inertsil® Econo PREP-ODS			⊙	⊙		⊙		⊙					⊙	
Inertsil® Econo PREP-SIL			⊙										⊙	

⊙: The test is employed for every batch
 ○: The test is employed periodically