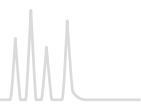




NUCLEOSIL® phase overview



Overview of NUCLEOSIL® HPLC phases

Phase	Specification	Page	Stability	Interactions	Structure
NUCLEOSIL® RP-Phasen					
C ₁₈	octadecyl phase, medium density modification, endcapping 15 % C · USP L1	214	pH 2–8	hydrophobic (van der Waals) interactions slight residual silanol interactions	NUCLEOSIL® (Si-O ₂) _n
C ₁₈ HD	octadecyl phase, high density monomeric modification, endcapping 20 % C · USP L1	214	pH 2–9	hydrophobic (van der Waals) interactions	NUCLEOSIL® (Si-O ₂) _n
C ₁₈ AB	octadecyl phase, special crosslinked modification, endcapping 25 % C · USP L1	214	pH 1–9	steric and hydrophobic interactions	NUCLEOSIL® (Si-O ₂) _n
C ₁₈ Nautilus	octadecyl phase, embedded polar group, endcapping 16 % C · USP L60	214	pH 2–8 up to 100 % H ₂ O	hydrophobic and polar interactions	NUCLEOSIL® (Si-O ₂) _n
Protect I	special RP phase, protective polar group, monomeric modification, endcapping 11 % C	216	pH 2–8 up to 100 % H ₂ O	hydrophobic and polar interactions	NUCLEOSIL® (Si-O ₂) _n
C ₈ ec	octyl phase, medium density modification, endcapping 9 % C · USP L7	217	pH 2–8	hydrophobic (van der Waals) interactions slight residual silanol interactions	NUCLEOSIL® (Si-O ₂) _n
C ₈	octyl phase, no endcapping 8.5 % C · USP L7	217	pH 2–8	hydrophobic (van der Waals) interactions noticeable residual silanol interactions	NUCLEOSIL® (Si-O ₂) _n
C ₈ HD	octyl phase, high density modification, endcapping 13 % C · USP L7	218	pH 2–8	hydrophobic (van der Waals) interactions	NUCLEOSIL® (Si-O ₂) _n
C ₄	butyl phase, medium density modification, endcapping ~ 2 % C · USP L26	219	pH 2–8	hydrophobic (van der Waals) interactions residual silanol interactions	NUCLEOSIL® (Si-O ₂) _n



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Overview of NUCLEOSIL® HPLC phases

Phase	Specification	Page	Stability	Interactions	Structure
C ₂	dimethyl phase 3.5 % C · USP L16	219	pH 2–8	hydrophobic (van der Waals) interactions noticeable residual silanol interactions	NUCLEOSIL® (Si-O ₂) _n
C ₆ H ₅	phenyl phase, no endcapping 8 % C · USP L11	220	pH 2–8	π–π interactions and hydrophobic interactions noticeable residual silanol interactions	NUCLEOSIL® (Si-O ₂) _n
Polar NUCLEOSIL® phases and NUCLEOSIL® ion exchangers					
CN / CN-RP	cyan (nitrile) phase USP L10	222	pH 2–8	π–π, polar and hydrophobic interactions	NUCLEOSIL® (Si-O ₂) _n
OH (Diol)	diol · USP L20	220	pH 2–8	polar interactions (hydrogen bonds)	NUCLEOSIL® (Si-O ₂) _n
NH ₂ / NH ₂ -RP	amino · USP L8	221	pH 2–8	polar and hydrophobic interactions, weak ion exchange interactions	NUCLEOSIL® (Si-O ₂) _n
N(CH ₃) ₂	dimethylamino	221	pH 2–8	polar and hydrophobic interactions, weak ion exchange interactions	NUCLEOSIL® (Si-O ₂) _n
SA	sulfonic acid, strongly acid cation exchanger (SCX) USP L9	223	pH 2–8	strong ion exchange interactions	NUCLEOSIL® (Si-O ₂) _n
SB	quaternary ammonium, strongly basic anion exchanger (SAX) USP L14	223	pH 2–8	strong ion exchange interactions	NUCLEOSIL® (Si-O ₂) _n
SiOH	unmodified spherical silica USP L3	224	pH 2–8	polar	NUCLEOSIL® (Si-O ₂) _n