

TECHNICAL DATA SHEET

PIEZOTECH FC™ 50 POWDER

	ACCEPTANCE RANGES	GUIDELINE VALUES	METHOD
COMPOSITION			
VF3 CONTENT (<i>mol %</i>)	50 ± 2		¹ H NMR
THERMAL PROPERTIES			
CURIE TRANSITION (°C)	58 - 63		
T _M (°C)		158 - 163	DSC
ENTHALPY OF CURIE TRANSITION (<i>J/g</i>)	-	4 - 8	(10 mg) Second heat 10°C/min
ENTHALPY OF MELTING (<i>J/g</i>)	-	24 - 29	
MOLAR MASS CHARACTERISTICS			
MFI (<i>230°C under 10 kg</i>)	1 - 8		ASTM D1238
MW (<i>kDA</i>) <i>Mass average molar mass</i>		350 - 550	SEC Chromatography
MN (<i>kDA</i>) <i>Number average molar mass</i>		150 - 250	Solvent DMF Refractometric detection PS standard
PI <i>Dispersity index (Mw/Mn)</i>		2.0 - 2.4	
FERROELECTRIC CHARACTERISTICS			
	TYPICAL VALUES		
REMNANT POLARIZATION (<i>mC/m²</i>)	30		
COERCIVE FIELD (<i>V/μm</i>)	36		Poled @ 150V/μm
SPONTANEOUS POLARIZATION (<i>mC/m²</i>)	41		
d ₃₃ (<i>pC/N</i>)	-18		Berlincourt (700N/100Hz)
RELATIVE PERMITTIVITY	11		Capacity measurement at 1kHz