

TECHNICAL DATA SHEET

PIEZOTECH FC™ 25 POWDER

	ACCEPTANCE RANGES	GUIDELINE VALUES	METHOD
COMPOSITION			
VF3 CONTENT (<i>mol %</i>)	25 ± 1		¹ H NMR
THERMAL PROPERTIES			
CURIE TRANSITION (<i>°C</i>)	112 - 123		
<i>T_M</i> (<i>°C</i>)		148 - 152	DSC
ENTHALPY OF CURIE TRANSITION (<i>J/g</i>)	-	20 - 26	(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
<i>M_w</i> (<i>kDA</i>)		370 - 530	
<i>Mass average molar mass</i>			SEC Chromatography
<i>M_n</i> (<i>kDA</i>)		170 - 240	Solvent DMF
<i>Number average molar mass</i>			Refractometric detection
PI		2.0 - 2.3	PS standard
<i>Dispersity index (M_w/M_n)</i>			
FERROELECTRIC CHARACTERISTICS			
	TYPICAL VALUES		
REMNANT POLARIZATION (<i>mC/m²</i>)	65		
COERCIVE FIELD (<i>V/μm</i>)	50		Poled @ 150V/μm
SPONTANEOUS POLARIZATION (<i>mC/m²</i>)	70		
<i>d₃₃</i> (<i>pC/N</i>)	-24		Berlincourt (700N/100Hz)
RELATIVE PERMITTIVITY	11		Capacity measurement at 1kHz