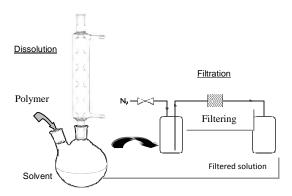


# **Piezotech Processing's guides**

## - How to formulate -

Piezotech FC and Piezotech RT polymers are soluble in different solvents given below. The concentration of the polymer in the solvent has to be adjusted in order to get the appropriate viscosity corresponding to the printing process used. The actual ink formulation can be obtained by progressively adding the polymer into the solvent under heating. In order to get homogeneous films with high electrical breakdown a filtering step of the solution is required (ideally  $1\mu m$  or less). This will remove impurities and prevent the formation of gel particles. Standard commercial filtering processes using filtering cartridges or filtering syringes are commonly used.



Ink formulation processing

Indicative list of solvents that can be used to dissolve & formulate Piezotech FC<sup>™</sup> and Piezotech RT<sup>™</sup> polymers

Solvent	Boiling Point (°C)	Flash Point (°C)
Tetrahydrofuran	65	-17
Methyl EThyl Ketone	80	-6
Dimethyl formamide	153	67
Dimethyl acetamide	166	70
Tetramethyl urea	177	65
Dimethyl Sulfoxide	189	35
Trimethyl phosphate	195	107
N-Methyl-2-Pyrrolidone	202	95
Acetone	56	-18
Methyl Isobutyl Ketone	118	23
Glycol Ethers	118	40
Glycol Ether Esters	120	30
N-Butyl Acetate	135	24
Cyclohexanone	157	54
Diaceton Alcool	167	61
Diisobutyl Ketone	169	49
Ethyl Aceto Acetate	180	84
Butyrolactone	204	98
Isophorone	215	96
Triethyl phosphate	215	116
Carbitol Acetate	217	110
Propylene Carbonate	242	132
Glyceryl triacetate	258	146
Dimethyl Phtalate	258	149

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#### Ferroelectric Ink for Organic Electronics

#### **Safety and Storage**

Please refer to the safety datasheet

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