Novel Extraction Process for Gold Recovery from Thiosulphate Solution Using Phosphonium Ionic Liquids

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Table S1: Chemical structure and properties of Cyphos IL 101

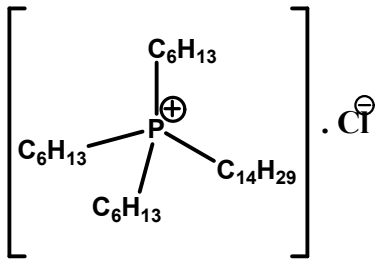
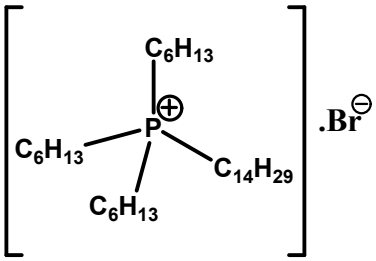
CYPHOS IL 101	**Properties**	
	Physical state (25 ˚C)	Liquid
	Molar mass (g/moL)	519.31
	Density (g/cm^3)	0.882
[trihexyl(tetradecyl)phosphonium chloride]	Viscosity (cP at 25 ˚C)	1824
	Solubility	Organic solvents
Molecular Formula: $C_{32}H_{68}PCl$	Flammability	non-flammable
Abbreviated formula: $\overline{[P_{66614}{}^{+}][Cl^{-}]}$		

Table S2: Chemical structure and properties of Cyphos IL 102

CYPHOS IL 102	**Properties**	
	Physical state (25 ˚C)	Liquid
	Molar mass (g/moL)	563.77
	Density (g/cm^3)	0.955
[trihexyl(tetradecyl)phosphonium bromide]	Viscosity (cP at 25 ˚C)	2094
	Solubility	Organic solvents
Molecular Formula: $C_{32}H_{68}PBr$	Flammability	Non-flammable
Abbreviated formula: $\overline{[P_{66614}{}^{+}][Br^{-}]}$		