

Diluents acting as co-solvents 100a

Main Solvent	NFM	NFM	NFM	NFM	NFM	NFM
Co-solvent	None	<i>o</i> -xylene	Methyl Acetate	Ethyl Acetate	<i>N</i> -butyl acetate	Isopropylacetate
Example Type	Comp.	Comp.	Emb.	Emb.	Emb.	Emb.
Average Viscosity Decrease (%)	0	60	88	75	65	65
Fuming Present (Post-Cure)	Yes	No	No	No	No	Yes
Odor Present (Post-Cure)	Yes	Yes	No	No	Slight	Slight
Degree of Color (Cured Film)	Light	Light	Lighter	Lighter	Lighter	Light

Diluents acting as co-solvents 100b

Main Solvent	NFM	NFM	NFM	NFM	NFM	NFM
Co-solvent	Cyclohexanone	Ethyl Lactate	Methanol	Isopropanol	Anisole	2-acetyl piperidine
Example Type	Emb.	Emb.	Emb.	Emb.	Emb.	Emb.
Average Viscosity Decrease (%)	70	33	--	73	--	50
Fuming Present (Post-Cure)	No	Yes	No	No	No	Yes
Odor Present (Post-Cure)	No	Yes	Yes	No	No	Yes (not from NFM)
Degree of Color (Cured Film)	Lighter	Light	Lighter	Lighter	Light	Light

FIG. 1

Diluents acting as co-solvents 200a

Main Solvent	NFM	NFM	NFM	NFM	NFM	NFM	NFM
Co-solvent	None	γ -Hexalactone	THF	Furfuryl Alcohol	Acetophenone	Cumene	Cyclopentyl methyl ether
NFM:Co-solvent Ratio	100%	80:20	80:20	80:20	80:20	80:20	80:20
Example Type	Comp.	Emb.	Emb.	Emb.	Emb.	Emb.	Emb.
Average Viscosity Decrease (%)	--	35	76	7	34	45	64
Comments	Too viscous, medium color, poor boiling point (BP) or flashpoint for some coating applications.	Very good viscosity reduction.	Excellent viscosity reduction.	Viscosity reduction.	Very good viscosity reduction.	Very good viscosity reduction.	Excellent viscosity reduction.

FIG. 2A

Diluents acting as co-solvents 200b

Main Solvent	NFM	NFM	NFM	NFM	NFM	NFM	NFM	NFM
Co-solvent	Methyl-THF	N-Octyl Pyrrolidone	Rhodiasolv® PolarClean	Propylene Carbonate	Dioxalane	Methylethyl ketone (MEK)	Dimethyl succinate	TamiSolve® NxG
NFM:Co-solvent Ratio	80:20	80:20	70:30	70:30	70:30	70:30	70:30	70:30
Example Type	Emb.	Emb.	Comp.	Emb.	Emb.	Emb.	Emb.	Emb.
Average Viscosity Decrease (%)	73	29	-30	1	72	88	32	47
Comments	Excellent viscosity reduction.	Good viscosity reduction.	Very good toxicological profile. Very light color coating solution.	Better BP, flashpoint, and long term coating solution stability.	Excellent viscosity reduction.	Excellent viscosity reduction. Good curing profile.	Renewable resource and better long term coating solution stability.	Better BP and flashpoint.

FIG. 2B