Polyurethane Resin Solution for Symthetic Leather

Application

- Applicable to synthetic leather (seat for automobiles, furniture, clothing, shoes, etc.)
- Applicable to industrial materials (marking film, polishing pad, etc.)

Characteristics

- Capable of obtaining thin (less than several dozen μm), flexible and strong film after coating on release paper and evaporating the solvent.
- Capable of controlling performances such as durability and hardness by adjusting resin composition, and of developing a wider product range according to application.
- ME series：semi-non-yellowing PU, suitable for thin film formation and mainly used for skin materials.
- NE series：non-yellowing PU, suitable for thin film formation and mainly applicable to skin materials requiring discoloration-resistance.
- CU series：for wet processing.
- UD series：adhesives for ME/NE series.

Polyol composition and various perfomances

Various performances of polyurethane resin (PU) are affected by the polyol composition of raw material.
Chart on the right shows the performance comparison of our yellowing / semi-non-yellowing PU.
As a result, non-yellowing PU has inferior oil-resistance.

Polyols	Heat resistance	Oil resistance	Cold resistance	Flex resistance	Hydrolysis resistance	Chemical resistance
Polyester	good	good	good	good	fair	poor
Polyether	fair	fair	excellent	excellent	excellent	good
Polycarbonate	excellent	good	fair	good	excellent	good

Representative Products

Application	Type	Polyols	Product name
Skin layers (one-component type for film materials)	Yellowing / semi-non-yellowing	Polyester	ME-3134LPNS
			ME-3612NS
		Polyether	ME-8105LP
			ME-8115LP
		Polycarbonate	ME-8210NS
			ME-8220NS
	Non-yellowing	Polyester	NE-302HV
			NE-308
		Polyether / Carbonate	NE-8855-20N
			NE-8883HV
		Polycarbonate	NE-8811
			NE-8850
Materials for wet processing (porous layer formation) (one-component type for film materials)	Yellowing / semi-non-yellowing	Polyester	CU-4104E
			CU-4340NS
		Polyester	CU-8438NS
		Polyether / Carbonate	CU-8511NS
			CUS-1500
		Polycarbonate	CU-8614NS
			CU-9443M
Adhesives (one-component type for hot melt)	Yellowing	Polyester	UD-1305NS
Adhesives (two-component curing type for film materials)	Yellowing	Polyester	UD-660SA
			UD-750SA
		Polyether	UD-8310NTT
		Polyether / Carbonate	UD-8373BL

＊Formulation design of biomass-based polyurethane resin solution is also available.

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