

# Solvent-based Adhesives for Industrial Use

## Application

Adhesives for synthetic leather (i.e. TPU / PVC leather), tarpaulin and TPU belt

## Characteristics

- Excellent in adhesion to flexible PVC / TPU film.
- Also including toluene-free adhesives.
- Capable of improving heat-resistance/durability by using together with our hardeners.
- Available as a semi-non-yellowing type depending on hardeners selected, regardless of the kind of main component (with some exception).

### U series

- Capable of exhibiting excellent durability, heat-resistance and plasticizer-resistance, because of the selected polyol component.
- Applicable to roll / knife coating that requires a large amount of coating liquid, and to coating on non-smooth surface of substrate such as fiber, because of the relatively high viscosity.

### T series

- Solution-polymerized T-619(B) and T-744 : suitable for application requiring heat-resistance and durability, because the relatively high molecular weight.
- Solution-polymerized T-728, T-729 and T-731 : applicable to gravure coating for flexible PVC, because of the relatively low viscosity PVC.

### DUX series

- Excellent in resistance against heat / humidity aging, chemical-resistance and light discoloration resistance.
- Applicable to adhesives for industrial use requiring high durability, such as for electronic materials and outdoor use.

## Representative Products

### Main component

Product name	Non-volatile component (%)	Viscosity (dPa · s/25°C)	Solvent composition	Recommended hardener	Compounding ratio (specific gravity ratio), main component:hardener	Application and characteristics
U-507	45	1,000~2,000	TOL, MEK	UD-C	100:6	High crystallinity ester-based PU for PVC/woven fabric
U-507EA	45	1,000~1,500	EA	UD-C	100:6	Toluene-free type of U-570
U-527EM	28	20~60	EA, MEK	UD-C	100:4	High crystallinity ester-based PU for PVC/woven fabric
U-588NT-1	30	6~15	EA, MEK	UD-C	100:6	Durability improved grade of U-507
U-845	45	800~1,200	TOL, EA	C-75N	100:6	Semi-non-yellowing grade of U-507
T-619 (B)	22	60~200	THF, DMF, Ace	UD-C	100:5	Durable PU for conveyor belt
T-744	25	60~120	THF, DMF, Ace	UD-C	100:5	Ester-based PU for conveyor belt
T-728	30	25~32	TOL, MEK	C-18	100:10	Standard grade for PVC/PEF
T-729	30	30~60	EA	C-18	100:10	Toluene-free type of T-728
T-731	37	70~100	TOL, MEK	C-18	100:12	High solid / high viscosity type of T-728
DUX-1020	50	3~20	EA	C-99	30:1	High durability
DUX-210-5	50	1~10	EA	C-99	30:1	High durability / low viscosity

### Hardener

Product name	Non-volatile component (%)	Viscosity (dPa · s/25°C)	Solvent composition	Application and characteristics
C-18	100	1~3	—	Excellent heat-resistance / room temperature curing
C-26	40	0.01~0.03	EA	Diluted type of C-76
C-75N	75	1~6	EA	Non-yellowing
C-76	75	5~20	EA	Standard grade
C-83	100	15~30	—	Non-yellowing
C-99	100	5~40	—	Non-yellowing
UD-C	75	10~20	EA	Standard grade

TOL= Toluene, EA= Ethyl acetate, Ace= Acetone

\*The values shown above are typical values, not standard values.