

Adhesives

Applications

- Adhesives for food packaging films
- Adhesives for flexible packaging films

Characteristics

WA series (water-based PUD adhesives)

- A self-emulsifying polyurethane dispersion (PUD), these products are highly stable and do not require surfactants for dispersion. This provides excellent heat resistance and resistance to hot water.
- Two-component reaction-curable adhesives (or three-component according to application).
- Applicable to plastic films / foaming materials (except for aluminum foils).
- ◆ Compatibility with laminating equipment is key for both the WA and X series as mentioned above. Please contact us if you require a custom product to suit your specific equipment.

X series (100% solid adhesives)

- Two-component reaction-curable adhesives, developed for lamination process.
- No drying process is required.
- Two-component (or three-component) reaction-curable adhesives conforming to the Food Sanitation Act in Japan.
- Excellent in surface wettability on plastic film, and applicable to roll coating for thin film.
- Due to its high viscosity (or solid state) at room temperature, this product requires an exclusive laminator (e.g., a solventless laminator) and a supplying machine capable of mixing at a specified compounding ratio.

Representative Products

■ Water-based adhesives

Main components

Product name	Non-volatile component (%)	Viscosity (mPa · s/25°C)	Recommended hardener	Compounding ratio (specific gravity ratio), main component:hardener	Application and characteristic
WA-377-2	40	5~200	C-96	18 : 1	For industrial use
			C-24	18 : 1 : 1	For industrial use
			C-96		
WA-568	40	10~1,000	C-24	100:5	For industrial use, High crystallinity
WA-470-2	50	100~6,000	C-24	100:5.5	VOC-free, Flexible

Hardeners

Product name	Non-volatile component (%)	Viscosity (mPa · s/25°C)	Application and characteristic
C-24	100	2,000~3,000	Isocyanate
C-96	100	400~1,000	Non-isocyanate

Solvent-free adhesives

Main component (NCO)	Viscosity (mPa · s)	Hardener (OH)	Viscosity (mPa · s)	Compounding ratio (specific gravity ratio), main component:hardener	Application and characteristic
XC-235	700~1,400 (80°C)	XA-129	100~300 (40°C)	10 : 4	For flexible packaging materials, General-purpose, High sealing strength
XC-238	500~1,500 (80°C)	XA-128	50~200 (60°C)	10 : 4	For flexible packaging materials, General-purpose, Applicable to transparent vapor deposition film

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