

## Coatings & Engineering Materials Division

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## PRODUCT INFORMATION

### TAKELAC™ W Series

**Water-based Polyurethane Dispersion resins for Film Adhesives Application**

#### DESCRIPTION

TAKELAC™ W series is water-based polyurethane resins. It is a polycarbonate-based PUD resin, which shows unique performances. Softness, flexibility and elasticity suitable for adhesives and ink binders etc.

#### CHARACTERISTICS

- ◆ High Flexibility and Good adhesion with various film
- ◆ Good compatibility with various resins
- ◆ Good hydrolysis-resistance and heat resistance

#### PROPERTIES

TAKELAC™		W-605	W-5030	W-6010	W-5661	W-6110	W-6061
Typical Values	Appearance	Milky-White Liquid					
	Solids (%)	30	30	30	35	32	30
	pH	7.8	8.0	7.8	7.8	8.0	7.8
	Viscosity (mPa.s@25°C)	25	30	30	300	2500	50
	Solvent Content (%)	<1%	<1%	<1%	<1%	<1%	<1%
	Average Particle diameter (nm)	80	50	60	30	90	100
Macro polyol		Ester-base	Ester-base	Carbonate-base	Ether-base	Carbonate-base	Ether-base
Properties of Dry film	Tensile Strength of dry film (MPa)	20	34	35	4	55	10
	Elongation of dry film (%)	65	480	380	500	550	1000
	Tg of dry film (°C)	100	85	90	70	-20	25
	Iconicity	Anionic					

**The above mentioned properties are general information only and are not considered part of the product specifications.**

#### APPLICATION EXAMPLES

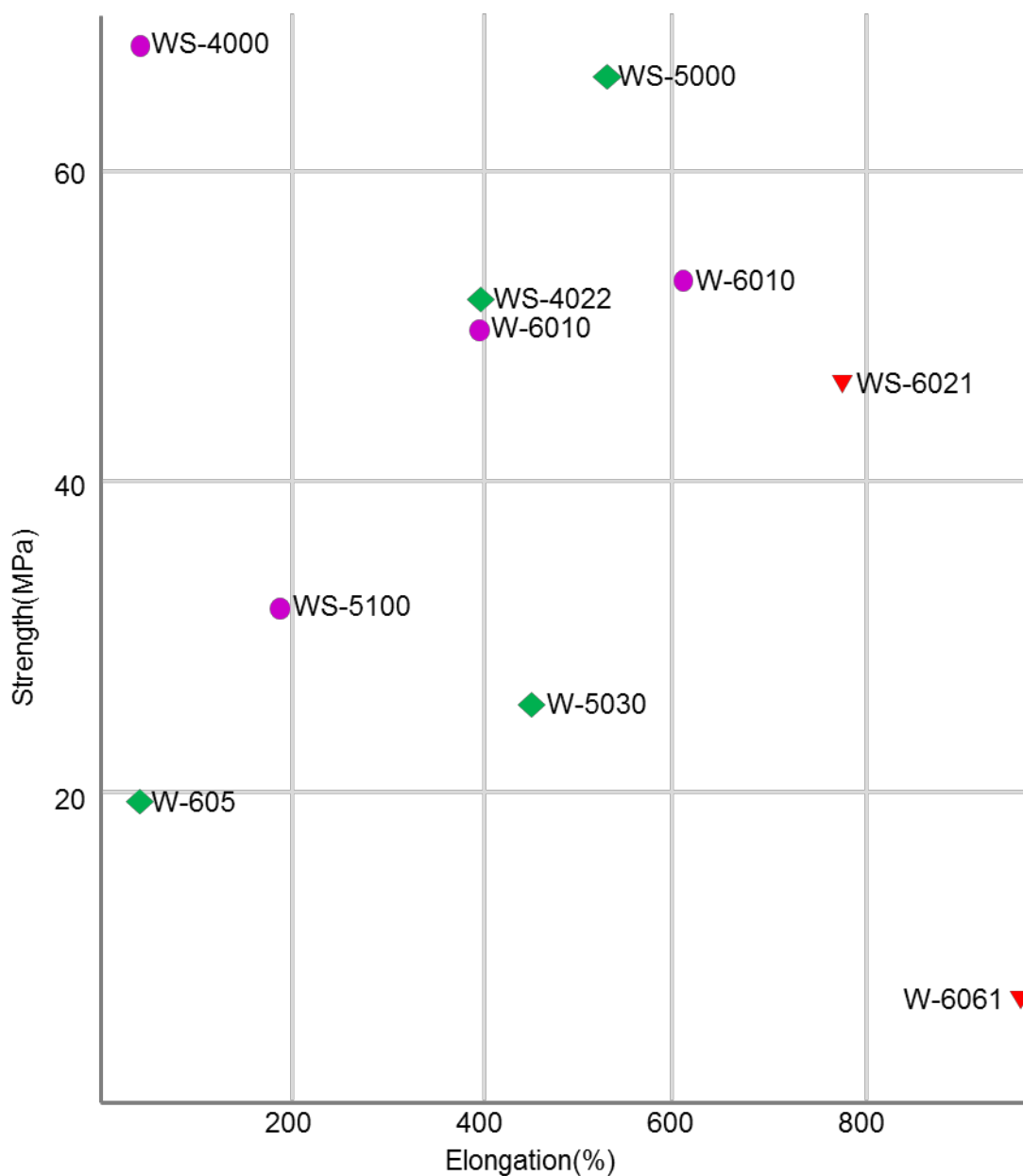
- ◆ Adhesives for film lamination (PET, PC, Nylon, OPP)
- ◆ Surface modifier
- ◆ Binder for W/B Ink
- ◆ Coatings and Textiles

#### NOTE

Please refer to our Material Safety Data Sheet for health and safety information on the product.

All information and other data contained in our product descriptions are averages and are given in good faith but without warranty. We cannot accept any liabilities for any damages or losses incurred as a result from the use of our information.

Figure.1 Lineup of PUD



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