

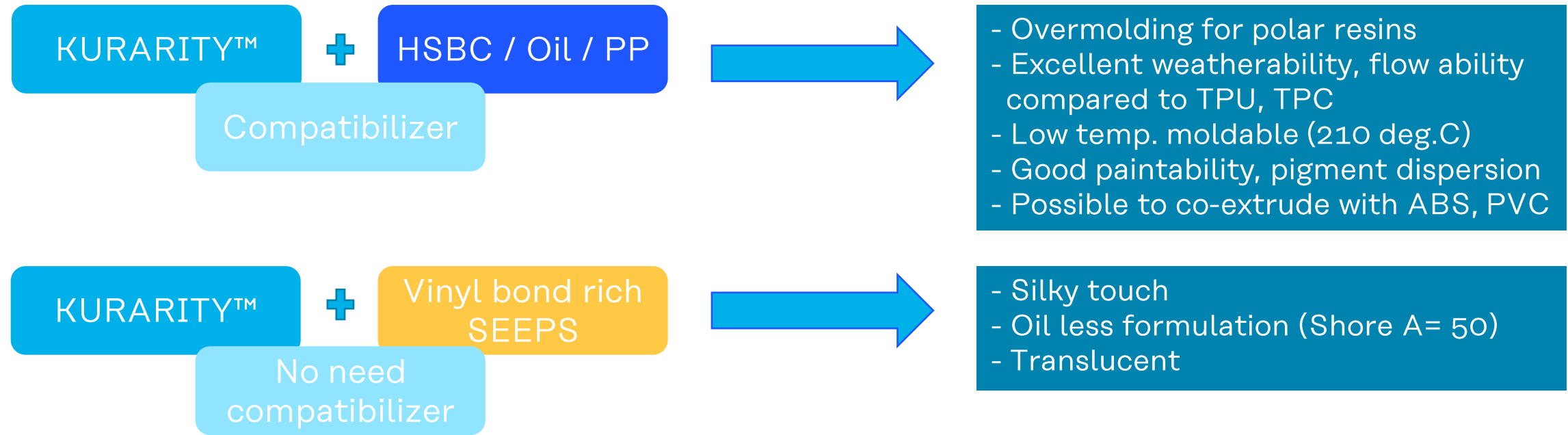
KURARITY™ for plastic / adhesive modification

KURARITY business promotion dept.
Elastomer Division

kuraray

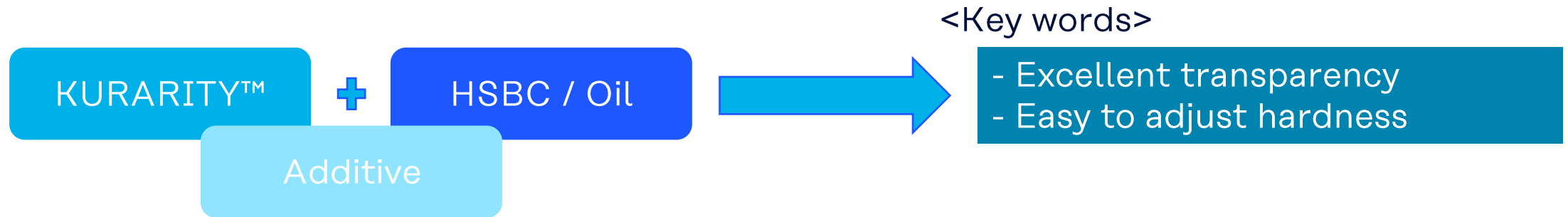
HSBC* / KURARITY™ compounds

*Hydrogenated Styrenic Block Co-polymer



-> Some customer asked for if HSBC/KURARITY™ can be transparent.
If it is possible, it will be very interesting technique.

HSBC / KURARITY™ transparency control technique



A: HSBC / Paraffin oil / KURARITY™



B: HSBC / Paraffin oil / KURARITY™ / KRISTALEX™ 5140

Add KRISTALEX™ 5140*

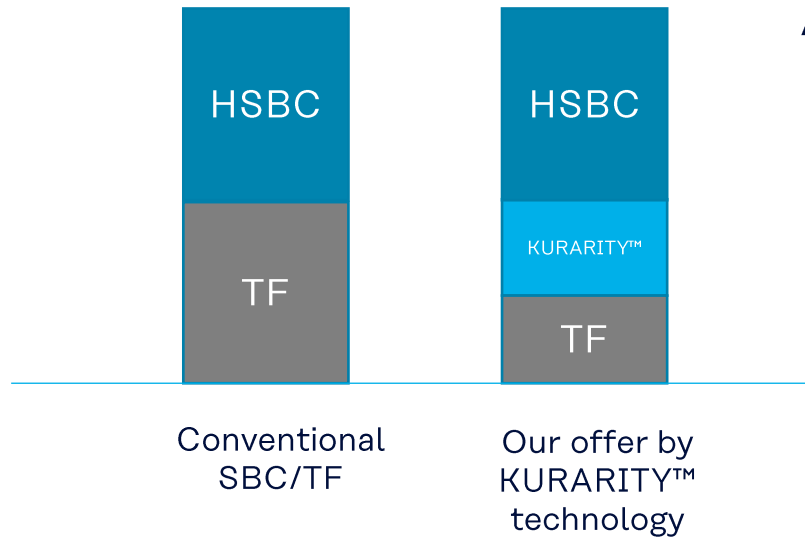


*KRISTALEX is a registered trademark of Eastman chemical resins inc..

HSBC / KURARITY™ for adhesive compound



<Concept>



<Example application> Adhesive for surface protection film(SPF)

Adhesive layer of SPF



Rough surface for protection

Adhesive and Pressure Sensitive Adhesive (PSA) modification

KURARITY™

+

UV curing adhesive



<Key words>

- Adjustment of solution viscosity
- Re-work ability
- Reduce curing shrinkage

KURARITY™

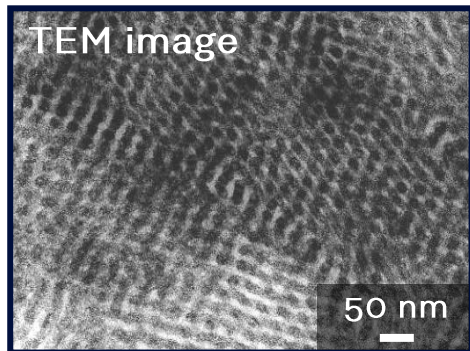
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Solvent based PSA



<Key words>

- Adjustment of solution viscosity
- High tackiness
- Adhesion to curved surface



KURARITY™
Physical crosslinking is completed after drying.

Polyester / KURARITY™ compound for overmolding



<Key words>

- Dry touch compound
- High flowability, good weatherability, paintability, oil resistance (vs. TPC*)

*Thermoplastic Copolyester

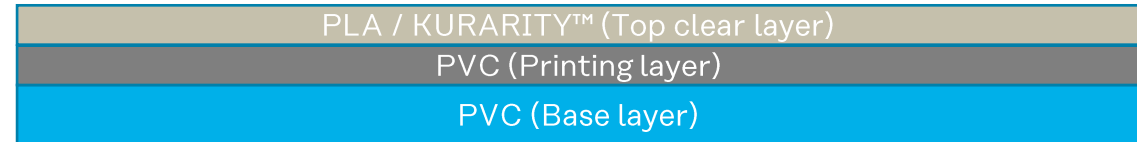
<Example application> Camera grips



PLA / KURARITY™ compounds



<Example application> Top clear layer of floor sheet



PVC / KURARITY™ compounds



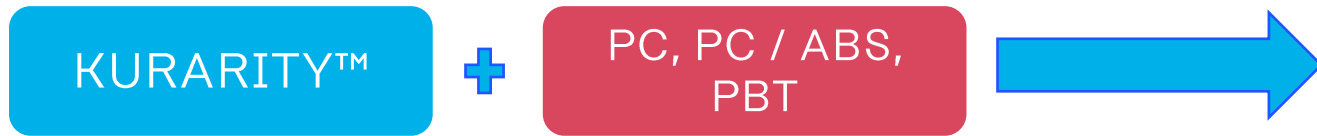
<Key words>

- Low Mw plasticizer free (KURARITY™ act as high Mw plasticizer)
- No plasticizer migration, volatile

				PVC / DINP	PVC / Polyester	PVC / KURARITY™
PVC	Straight type PVC (k = 67, P = 1000)			100	100	100
Plasticizer	DINP			60		
	Polyester type (Viscosity at 25 deg.C = 3000 mPa · s)				60	
	KURARITY™ LA3320					80
Additives	Acrylic processing aid (METABLEN™ P550A)					10
Items	Methods	Conditions	Units			
Appearance	-	23 deg.C	-	Transparent	Transparent	White
Hardness type A	ISO 7619-1	After 15 sec	-	80	87	68
Tensile strength at break	ISO 37	200 mm / min	MPa	16	21	5.3
Tensile elongation at break			%	350	350	150
Volume resistivity	ISO 2951	-	Ωcm	1.7 x 10 ¹¹	3.2 x 10 ¹²	3.0 x 10 ¹¹
Embrittlement temp.	ASTM D746	-	deg.C	-42	-17	-22
Migration to PMMA plate	In-house method	70 deg.C, 72 hr	wt change %	Bonding	0.5-1.0	< 0.5
Fogging (glass plate haze)	ISO 6452 reference	100 deg.C, 8 hr	%	30.5	16.8	8.5

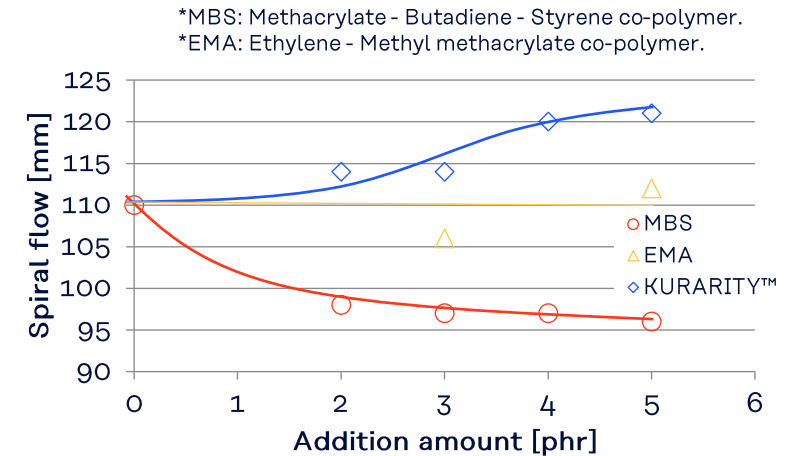
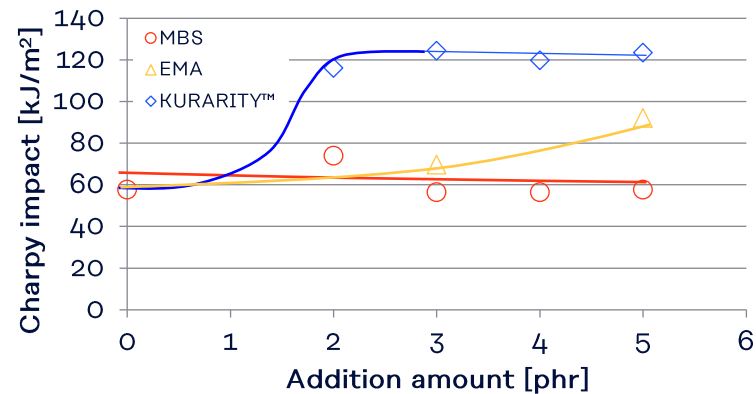
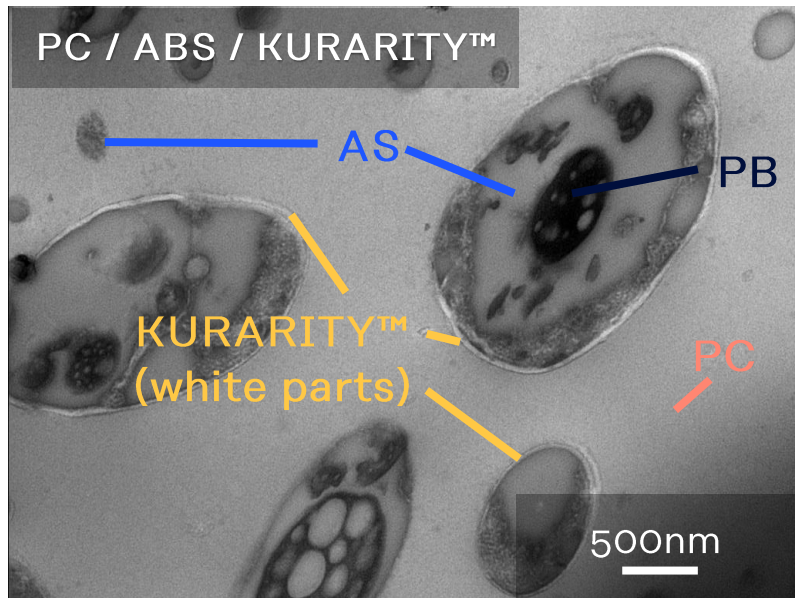
*METABLEN is a registered trademark of Mitsubishi Chemical Corporation.

Polar resin modifications (PC / ABS etc.)



<Key words>

- High flowability (vs. core-shell type impact modifier)
- Impact resistance



<Application>

- Automotive (Interior parts): PBT modification
- Automotive (Interior/external parts): PC / AS modification (Improved weatherability of PC / ABS)

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