



UNITED CHEMICAL

Resin is all we do, So we do it best.



C5 & Modified C5 Hydrocarbon Resins for Adhesive Industry

Typical Properties

Item Unit		Type	Softening Point°C	Color Gardner#	Melt Viscosity 200°C mPa.s	Mn	Mw	Mz	Mw/Mn	Aromatic Content %
Test Method			ASTM E 28	ASTM D1544	ASTM D 3236	GPC				IR
	UCA100L	C5	97-104	4	160-200	1,400	2,600	5,800	1.9	None
	UCA100	C5	98-103	5	190-240	1,100	3,800	9,500	3.5	None
Binder B Series	B1200	C5	90-100	4	80	1,000	1,600	3,000	1.6	None
	B1205	C5	96-105	4	150	1,100	2,000	4,200	1.8	None
	B1395	C5	90-100	4	70	1,000	1,300	1,900	1.3	None
	B1300	C5	95-104	5	120	1,000	1,400	2,000	1.4	None
	B1315	C5	105-120	4	150	1,300	2,300	4,000	1.8	None
	UCA9090	C5/C9	85-95	3	170	1,500	2,800	5,500	1.9	7.5
	UCA9095	C5/C9	96-104	4	120	1,200	2,200	4,700	1.8	11
Binder S Series	S2090	C5/C9	83-91	4	60	900	1,400	2,200	1.6	15
	S2100	C5/C9	89-97	4	70	900	1,300	2,100	1.5	3.5
	S2105	C5/C9	96-104	4	120	1,200	1,800	2,900	1.5	4.0
	UCA100C	C5/C9	97-104	5	100	800	1,200	1,700	1.5	60
	UCA120C	C5/C9	111-120	5	140	900	1,400	2,200	1.6	65
Binder T Series	T4100	C5/ Terpene	105-115	4	210	1,000	1,500	2,500	1.5	None
	T4200		115-123	4	280	900	1,400	2,100	1.4	3.5
Binder L Series	L2510	Liquid	0-15	3	24,000@40°C	550	600	650	1.1	None
	L3510	Liquid	0-15	3	7,500@40°C	550	600	700	1.1	None

1. Grades Suggestion

UCA100L, UCA100, B-1200, B-1205, B-1395, B-1300, B-1315 are piperylene based pure C5 aliphatic resins.
 S2090, S2100, S2105, UCA9090, UCA9095 are styrene modified C5 resins improving compatibility with TPR.
 UCA100C, UCA120C are C5 modified C9 copolymer resins mainly used in EVA and SBS HMA.
 T4100 & T4200 are terpene modified C5 resins providing higher Tg and Non-toxic property.
 L3510 & L2510 are liquid resins mainly providing adhesive excellent low-temperature performance.

As to the details, please feel free to ask TDS

2. Characteristics

United Chemical & Binder resins have wide range of SP, wide range of molecular weight distribution and different modifying ways helping the formulator to get special property of adhesive.



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3. Resin compatibility with TPR

Resin Feature	Grades	APO	SEBS	SIS	SBS	EVA	PP/PE	NR/BR
Pure C5	UCA100L	●●●●	●●●	●●●●	●	●●●	●●●●	●●●●
	UCA100	●●●	●●	●●●	●	●●	●●●●	●●●
	B1200/B1205	●●●●	●●●	●●●●	●	●●●	●●●●	●●●●
	B1300/B1395	●●●●	●●●	●●●●	●	●●●●	●●●●	●●●●
	B1315	●●●●	●●	●●●●	●	●●●	●●●●	●●●●
Styrene modified C5	UCA9090	●	●●●	●●●●	●●	●●●●	●●	●●●●
	UCA9095	●	●●●	●●●●	●●●	●●●●	●●	●●●
	S2090	●	●●●	●●●●	●●●	●●●●	●	●●●
	S2100/S2105	●	●●●	●●●●	●●	●●●●	●●	●●●●
C5/C9	UCA100C/UCA120C	●	●●	●	●●●●	●●●●	●	●●
C5/ Terpene	T4100	●	●●	●●●	●●●	●●●●	●	●●●●
	T4200	●	●●	●●●	●●●	●●●●	●	●●●●
Liquid	L3510/L2510	●●●	●●●	●●●●	●●●	●●●●	●●●●	●●●●

Note: ●=poor, ●●= partial, ●●●= good, ●●●●= Excellent

4. Recommended Application

Application	Recommended Grades
Tapes & Label	Binder B/S/T/L series, UCA100L, UCA100, UCA9095, UCA9090
Bookbinding	Binder B/S series, UCA100L, UCA100, UCA100C, UCA110C, UCA9095, UCA9090
Woodworking	Binder S series, UCA100C, UCA110C, UCA9095, UCA9090
Assembly	Binder L/S/T series, UCA9095, UCA9090
Sealants	Binder B/T Series, UCA100L, UCA100, UCA9095
Carpet Backing	Binder B Series, UCA100L, UCA100
Wax Blending	UCA100L, UCA100, B1205, B1300
Glue Trap	Binder B/S/L Series, UCA100L, UCA9095

5. Packaging and Storage

United Chemical & Binder resin is available both in 25Kg multi-ply paper bags and 500kg bags.

All resins with a low softening point present a risk of solidifying in hot weather.

Therefore for softening points of less or equal to 100°C, we recommend;

- ★ Avoid storage for prolonged period ;
- ★ Storage in a cool (25°C max), ventilated area, out of sunlight.

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