

## **Rosins, synthetic resins and related products : compatability and solubility chart / Hercules Powder Company.**

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**HERCULES**

**ROSINS  
SYNTHETIC RESINS  
AND RELATED PRODUCTS**

**compatibility and solubility chart**

• HERCULES TRADEMARK

**HERCULES® ROSINS • SYNTHETIC RESINS AND RELATED PRODUCTS**  
**compatibility and solubility chart**





# SOLUBILITY TABLE

Gross Solubility of 40-60% Solids at 65-85°F.

● = soluble      ◐ = partially soluble      ○ = insoluble

PRODUCT	SOLVENTS						PRODUCT	SOLVENTS					
	Alcohols	Esters	Ketones	Mineral Spirits	Aromatic	Specific (see below)		Alcohols	Esters	Ketones	Mineral Spirits	Aromatic	Specific (see below)
ABALYN	●	●	●	●	●		PENTALYN B56	◐	◐	◐	○	◐	
ABITOL	●	●	●	●	●		PENTALYN C	○	●	●	●	●	● (5)
BELRO	●	●	●	◐	●		PENTALYN G	○	●	◐	●	●	● (3)
CELLOLYN 21	○	●	●	●	●		PENTALYN H	○	●	●	●	●	
CELLOLYN 95-80†	○	●	●	●	●		PENTALYN K	○	●	○	●	●	● (3)
CELLOLYN 98-80†	○	●	●	●	●		PENTALYN X	○	●	○	●	●	○ (3)
CELLOLYN 102	○	●	●	●	●	● (1)	PENTALYN 255	●	●	●	○	●	● (6, 7)
CELLOLYN 104	○	●	●	●	●	● (2)	PENTALYN 802A	○	●	○	◐	●	● (5)
CELLOLYN 502-60X†	○	●	●	○	●		PENTALYN 830	●	◐	◐	○	●	● (5)
CELLOLYN 515-60X†	○	●	●	○	●		PENTALYN 833	○	●	○	◐	●	● (5)
CELLOLYN 582-60X†	○	●	●	○	●		PENTALYN 856	●	○	○	○	○	● (6, 7)
DYMEREX	●	●	●	●	●	● (3)	PENTALYN 860	○	●	○	●	●	● (3)
ESTER GUM 8D & 8L	○	●	●	●	●		PETREX ACID	●	●	●	○	●	● (7)
FLEXALYN 80M†	○	●	●	●	●		PETREX SS-70A†	●	●	●	○	○	● (7)
HERCOLYN D	●	●	●	●	●	○ (4)	PETREX 7-75†	●	●	●	○	●	
HMLIMED POLY-PALE	○	●	○	●	●		POLY-PALE	●	●	●	●	●	● (3, 5)
LEWISOL 7	○	●	●	●	●	● (3)	POLY-PALE ESTER 1	○	●	●	●	●	
LEWISOL 28	○	●	●	○	●		POLY-PALE ESTER 10	○	●	●	●	●	
LIMED POLY-PALE	○	●	○	●	●		RESIN NC-11	●	●	●	●	●	
NEOLYN 20	○	●	●	○	●		RESIN 731D‡	●	●	●	●	●	
NEOLYN 23-75†	○	●	●	○	●		RESIN 861‡	●	●	●	●	●	
NEOLYN 35D	○	●	●	○	●		ROSIN, WOOD‡	●	●	●	●	●	
NEOLYN 40	○	●	●	○	●		STAYBELITE‡	●	●	●	●	●	
NEOLYN 72	○	◐	◐	○	◐		STAYBELITE ESTER 3	○	●	●	●	●	
NEOLYN 91	○	◐	◐	○	◐		STAYBELITE ESTER 5	○	●	●	●	●	
NEOLYN 223†	○	●	●	○	●		STAYBELITE ESTER 10	○	●	●	●	●	
PE TETRASTEARATE	○	●	●	●	●		VINSOL ESTER GUM	○	●	●	○	◐	
PENTALYN A	○	●	◐	●	●		VINSOL	●	●	●	○	◐	● (5)
PENTALYN B25	●	●	●	●	●								

## SPECIFIC SOLVENTS

(1) isopropanol    (3) ink oils    (5) chlorinated hydrocarbons    (7) aqueous ammonia and  
 (2) butanol    (4) methanol    (6) diethylene glycol    alkalies, amines

†This is a solution form of the resin and the data shown pertain to the solids portion of the product.

‡Freshly prepared solutions of these products are completely soluble in the solvents indicated, but partially crystallize on standing. Lower concentrations (20-25%) usually remain in solution.

**HERCULES® ROSINS • SYNTHETIC RESINS • AND RELATED PRODUCTS**  
 compatibility and solubility chart



## THERMOPLASTICITY RELATIONS OF HERCULES® ROSINS, SYNTHETIC RESINS, AND RELATED PRODUCTS

Product	Typical Softening Point, °C.†	Product	Typical Softening Point, °C.†
HM LIMED POLY-PALE	197	RESIN NC-11	88
PENTALYN K	192	NEOLYN 35D	87
PENTALYN 833	183	BELRO	86
LIMED POLY-PALE	175	STAYBELITE ESTER 10	84
PENTALYN 255	174	POLY-PALE ESTER 1	83
PENTALYN 860	172	STAYBELITE ESTER 5	81
LEWISOL 7	168	ROSIN, WOOD	81
PENTALYN 802A	167	RESIN 731D	80
PENTALYN X	159	STAYBELITE	75
DYMEREX	150	CELLOLYN 98-80T‡	74
VINSOL ESTER GUM	148	NEOLYN 20	73
LEWISOL 28	141	NEOLYN 223‡	72
PENTALYN C	135	RESIN 861	72
PENTALYN G	135	NEOLYN 23-75T‡	72
CELLOLYN 102	133	PE TETRASTEARATE	67
PENTALYN 856	130	CELLOLYN 502-60X‡	67
PENTALYN B56	122	CELLOLYN 21	63
VINSOL	120	CELLOLYN 95-80T‡	54
NEOLYN 91	117	CELLOLYN 515-60X‡	50
PENTALYN B25	116	CELLOLYN 582-60X‡	50
PENTALYN 830	116	PETREX 7-75T‡	50
POLY-PALE ESTER 10	112	NEOLYN 40	45
PENTALYN A	111	PETREX ACID	44
NEOLYN 72	107	FLEXALYN 80M‡	44
PENTALYN H	104	ABITOL	} very viscous liquids
PETREX SS-70A‡	104	STAYBELITE ESTER 3	
POLY-PALE	102	ABALYN	} viscous liquids
CELLOLYN 104	100	HERCOLYN D	
ESTER GUM 8D & 8L	91		

†As determined by Hercules Drop Method. A single shipment of any of these resins may vary  $\pm 3-5^{\circ}\text{C.}$  from the typical value shown, which is an average softening point of many production lots.

‡This is a solution form of the resin, and the softening point value shown is that of the solids portion of the product.

PINE & PAPER CHEMICALS DEPARTMENT

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