



CARBOSET®

DORESCO®

HYCAR®

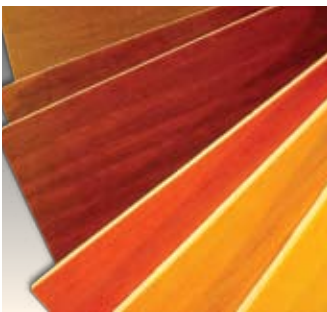
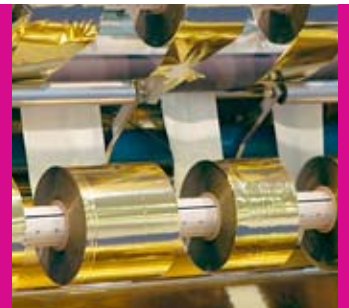
HYSTRETCH™

PERMAX®



## PRODUCT SELECTION GUIDE

# High-Performance Polymers for Functional Coatings



SANCURE™

VYCAR™

CARBOSET®

DORESCO®

HYCAR®

HYSTRETCH™

PERMAX®

SANCURE™

VYCAR™

CARBOSET®

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Lubrizol provides a complete line of resins and polymers to improve the performance of functional coatings. From specialty tapes, labels and graphic films to automotive and electronics products, Lubrizol supplies the technology to help you formulate the innovative products demanded in today's marketplace.

Our complete product portfolio offers a wide range of properties, including high levels of adhesion, excellent stability and resistance to chemicals, wear and water as well as some products with FDA clearances.

No matter what your application need, Lubrizol can help you meet a broad range of challenges. Our complete line of polymers for functional coatings includes:

- **Carbaset® and Hycar® Acrylic Emulsions:** Resins and emulsions with excellent adhesion to a variety of substrates. These can produce a permanent water-resistant coating or a temporary alkaline removable coating.
- **Hystretch™ Elastomeric Emulsions:** Ultrasoft, hydrophobic polymers that provide a slight, non-blocking tack.
- **Permax® Polymers:** PVDC and urethane polymers that control barrier properties



## High-performance polymers for functional coatings

HYSTRETCH™

PERMAX®

SANCURE™

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- **Sancure™ Polyurethane Dispersions:** Urethane polymers with excellent adhesion to many substrates. Sancure products form a high-gloss and a clear, durable film when dry. They also offer excellent abrasion-resistance properties.
- **Vycar™ Emulsions:** Offer excellent resistance properties and firmness. They are also available in flame-retardant and formaldehyde-free formulations.
- **Doresco® Resins:** Ideal for protective coatings and foil stamp applications, Doresco resins provide good intercoat adhesion, durability, heat-resistance and hardness.

### Features & Benefits:

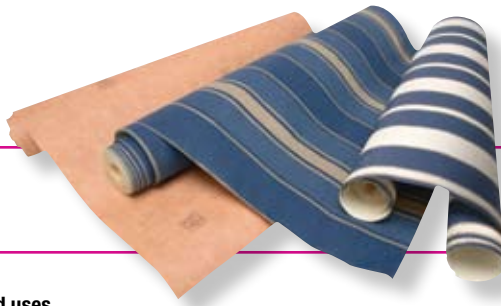
- Ideal for specialty applications including papers, tapes, foils, automotive and electronics
- Superior resistance to chemicals, wear and water
- Good adhesive properties
- Good solvent-resistance
- Specified products produce excellent corrosion resistance
- Specified products produce heat sealable FDA-compliant coatings

# A Wide Range of Polymers for All Your Functional Coatings Needs

Carboaset®, Hycar®, Hystretch™, Permax®, Sancure™ and Vycar™ Polymers

Resins and polymers for functional coatings and specialty applications.

Product	Type	% Solids	pH	Viscosity	Tg (°C)	Cosolvent (5 NMP)	VOC (g/l)	Acid number	Charge	Heat Reactive	Carboxylated	100% Modulus	Tensile Strength
Carboaset 511	—	30	6.7	40	55	—	—	75	—	—	—	—	—
Carboaset 514H	—	40	7	350	28	—	—	65	—	—	—	—	—
Carboaset 525	—	100	—	—	37	—	—	80	—	—	—	—	—
Carboaset 526	—	100	—	—	70	—	—	100	—	—	—	—	—
Carboaset 527	—	100	—	—	54	—	—	80	—	—	—	—	—
Hycar 26084	—	48	6.1	110	8	—	—	—	A	Yes	Yes	—	—
Hycar 26106	—	50	5	80	29	—	—	—	A	Yes	Yes	—	—
Hycar 26138	—	49	5.5	60	25	—	—	—	A	Yes	—	—	—
Hycar 26256	—	50	2.5	140	45	—	—	—	A	Yes	—	—	—
Hycar 26288	—	50	4	60	20	—	—	—	A	Yes	Yes	—	—
Hycar 26315	—	49.5	2.1	36	55	—	—	—	A	Yes	Yes	—	—
Hycar 26348	—	48.5	6	200	30	—	—	—	A	Yes	—	—	—
Hycar 26349	—	49	4.6	135	12	—	—	—	A	Yes	—	—	—
Hycar 26523	—	42	5	20	27	—	—	—	A	—	Yes	—	—
Hycar 2679	—	49	3.7	100	-3	—	—	—	A	Yes	—	—	—
Hystretch V-29	—	50	8	40	-29	—	—	—	A	Yes	Yes	—	—
Hystretch V-43	—	50	8	150	-43	—	—	—	A	Yes	Yes	—	—
Hystretch V-60	—	49	8	40	-60	—	—	—	A	Yes	Yes	—	—
Permax 200	—	44	6	200	—	—	—	—	N	—	—	500	3,700
Permax 230	—	33	5.6	600	—	—	—	—	N	—	—	500	1,200
Permax 803	—	59.5	2	50	—	—	—	—	—	—	—	—	—
Sancure 1601	Polyester	35	8.5	1,500	—	11.3	306	—	—	—	—	400	4,525
Sancure 1828	—	35	8	500	—	—	243	—	A	—	—	4,900	5,200
Sancure 2026	Polyester	40	8.3	500	—	6.8	187	—	—	—	—	950	4,200
Sancure 777	Polyester	35	10	75	—	8.1	253	—	—	—	—	2,000	5,100
Sancure 825	Polyester	34	8.5	425	—	8.1	321	—	—	—	—	4,800	6,600
Sancure 898	Polyester	32	7.8	200	—	7.8	258	—	—	—	—	5,125	6,100
Vycar 351	—	57	10.3	20	—	—	—	—	A	—	—	—	—
Vycar TN-810	—	52	8.5	20	55	—	—	—	A	—	—	—	—
Vycar 460X46	—	49	5	40	7	—	—	—	A	—	—	—	—
Vycar 460X95	—	51	5	20	73	—	—	—	A	—	—	—	—



**Elongation at Break**

**Description / Suggested uses**

—	Firm, high acid polymer. Tough ink when crosslinked.
—	Soft, higher acid dispersion. Excellent rewet uncrosslinked.
—	Solid all acrylic resin with excellent adhesion to a variety of substrates. Can produce a permanent water resistant coating or temporary alkaline removable coating.
—	Solid all-acrylic, low-molecular-weight resin-soluble in alkaline water and many organic solvents. Polymer can be used to produce water resistant coatings or temporary alkaline removable coatings.
—	100% dry granular version of Carboset 511.
—	Heat seal coatings
—	Release coating; film former at 150°F
—	Durable, special paper coating binder; excellent solvent resistance.
—	Hard glossy top coatings, good chemical resistance, primer coating.
—	Heat sealable; FDA compliant for direct food contact.
—	Heat sealable; FDA compliant for direct food contact; blends with Hycar 26288; excellent water resistance.
—	Hydrophobic; excellent oil and solvent resistance for tape release coatings.
—	Extremely durable coatings; book cover stock; solvent and plasticizer resistant.
—	Hydrophilic, excellent oil and solvent resistance for tape release coatings.
—	Wear layer coatings.
—	Ultrasoft, hydrophobic, slightly tacky, antiskid coatings; tack is nonmigratory, will not transfer.
—	Excellent softness with only a slight degree of tack.
—	Ultra soft with only moderate tack.
600	Aliphatic polyether waterborne urethane polymer that provides high MVTR.
400	Aliphatic polyether waterborne urethane polymer that provides high MVTR.
—	Vinylidene chloride acrylate copolymer that displays extremely low moisture vapor permeability and excellent corrosion resistance.
550	Heat reactive coating with excellent adhesion to many substrates.
150	Forms a high gloss, clear, durable and abrasion resistant film upon drying.
560	Weather-resistant coating, good heat seal properties; forms soft, flexible clear film.
410	Outstanding shear stability and excellent abrasion resistance.
200	Produces tough, clear, high-gloss films with outstanding chemical resistance.
300	Forms very hard but flexible coatings with good stain and chemical resistance. Fine particle size.
—	Product family offers excellent wash/wear resistance, chemical resistance, firmness, flame retardance and is formaldehyde free.
—	Fire retardant, wear layer protective coatings
—	Self-crosslinking with heat at or near 300°F; weather, water, solvent, alcohol and alkali resistance.
—	Low temperature heat cure without a catalyst, excellent substrate adhesion, improved resistance to water, compatible with other Vycar latexes.



**Doresco®  
Resins and Polymers**

*Resins and polymers for functional coatings and specialty applications.*

Product	Tg	Gardner Color	Gardner Viscosity	Non-Volatiles %	Solvent	Viscosity (cps)/(cP)	Description / Suggested Uses
Doresco AC13-1X40	—	0-1	—	40	Toluene / nButanol	7200	Utilized in the manufacture of automotive refinishing enamels, vinyl inks, hot stamp foil lacquer films and other coatings where intercoat adhesion, exterior durability, hardness and color retention and spray ability are important.
Doresco AC209-4	20	—	—	50	Toluene	3400	Protective coating for circuit boards.
Doresco AC209-23	20	—	—	33	Oxol 100	2500	Protective coating for circuit boards.
Doresco AC281-9	—	1	7	55	Toluene	—	Hot stamp foil applications.
Doresco AC281-25	132	1	X	45	MEK	—	Pigmented, colored lacquer coats for hot stamp foil applications.
Doresco AC32-63	85	0+	—	50	Toluene	1,600	Medium hardness acrylic resin that is an excellent grinding vehicle and modifier, suited to many applications.
Doresco AC341-2	136	1	—	45	MEK / Ethanol	1,000	Unique product designed for the hot stamp foil and vacuum metalizing industry.
Doresco AC479-6	—	0	—	50	Butyl Acetate	17,500	Protective coating for circuit boards.





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Information is also available on-line at

**[www.lubrizolcoatings.com](http://www.lubrizolcoatings.com)**



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