

Lubrizol

PAPER & TEXTILES



RESINS,
ADDITIVES &
FORMULATED
SOLUTIONS



PERFORMANCE TEXTILE COATINGS PRODUCT GUIDE



WHAT WE ADD MAKES THE DIFFERENCE.™

As a global specialty chemical company, Lubrizol offers effective solutions to enhance textile performance. Our resin, polymer, additive and formulated solutions portfolio improve a broad range of functional and aesthetic properties such as durability, flame retardancy, abrasion resistance, water repellence, breathability and cooling, while balancing required look and feel characteristics—clarity, gloss/matte, hand, drape, noise dampening, etc. We dedicate our global expertise to providing powerful solutions that give our customers a competitive edge when developing new products or enhancing their current offerings.

CUSTOMER FOCUSED SOLUTIONS

Myflam®, Performax® and PrintRite® compounds are used in a variety of textile coating applications, such as technical, transportation, apparel and home furnishing fabrics. These products can be custom formulated to impart multi-functional properties that improve substrate performance. All Lubrizol materials in this brochure can be employed to give synergistic properties to these formulated solutions. Custom formulating allows us to create products that enable unique multi-functional characteristics, addressing industry test procedures, customer requirements, equipment specifications and end-use performance. Please consult your Lubrizol sales or technical representative for helpful advice.



ENVIRONMENTALLY CONSCIOUS SOLUTIONS

Formaldehyde-, antimony- and halogen-free, low-VOC, recyclable and re-extrudable technology—Lubrizol's extensive portfolio of resins, polymers, surface modifiers, hyperdispersants and custom-formulated solutions include an excellent choice of environmentally conscious options.

CUSTOMER TAILORED SOLUTIONS

Contrary to a “one size fits all” approach when making product recommendations, our application experts are well skilled in putting together custom solutions that meet a customer's unique requirements. Their market-specific knowledge of what works best for a specific end use is further reinforced by the extensive testing conducted at Lubrizol, using the same testing methodology as our customers.

CUSTOMER-DRIVEN RESEARCH & DEVELOPMENT

Lubrizol research scientists use statistical modeling and have access to thousands of monomer combinations, providing them with the right tools for continuous innovation. If the right solution for a given market application cannot be drawn from Lubrizol's existing choice of product offerings, our R&D team stands ready to either modify existing technology or forge a new product advancement to better meet customer needs.



ACRYLIC EMULSIONS



| | EMULSION | Tg (°C) | CHARGE | SOLIDS (%) | pH | SPECIFIC GRAVITY | VISCOSITY (cP) | HEAT REACTIVE | CARBOXYLATED | DESCRIPTION/SUGGESTED USES |
|--------------|----------------|---------|--------|------------|------|------------------|----------------|---------------|--|---|
| VERY SOFT | Hycar® 26-1743 | -43 | A | 50 | 8.5 | 1.03 | 200 | | • | Formaldehyde-free. Very soft and elastic with low tack. Backcoatings, anti-pill, nonwoven and paper saturant. |
| | Hycar® 26843 | -35 | A | 65 | 6.5 | 1.06 | 150 | | • | High solids textile coatings/adhesives, very soft, flexible, good wet tack. Exhibits good plasticizer resistance. |
| | Hycar® T-122 | -30 | A | 48 | 3.2 | 1.05 | 30 | • | • | Flock adhesive/backcoatings, excellent drape. Very good water and solvent resistance. |
| | Hycar® T-9202 | -26 | A | 59 | 3.5 | 1.07 | 100 | • | | High solids textile coatings/adhesives. Blends with Hycar T-9207. |
| | Hycar® 26-1042 | -25 | A-N | 50 | 3.5 | 1.06 | 200 | • | • | Soft, solvent resistant; durable backcoatings. |
| | Hycar® T-91 | -16 | A | 50 | 2.5 | 1.06 | 100 | • | • | Foam/froth backcoatings, excellent durability to laundering/dry cleaning, excellent cold flex. |
| | Hycar® 26-1199 | -15 | A | 49 | 3.7 | 1.06 | 550 | | • | Formaldehyde-free, soft binder; very hydrophobic. |
| | Hycar® 26083 | -15 | A | 52.5 | 6 | 1.07 | 55 | • | • | Low-temperature flexibility; clear, white-water color; wash and dry clean durable. |
| | Hycar® 26552 | -15 | A | 47 | 4.5 | 1.05 | 110 | | • | Formaldehyde-free, hydrophobic polymer, highly redispersible in most processes until cured. Excellent for medical applications. |
| SOFT | Hycar® 26-0202 | -12 | A | 50 | 3.7 | 1.06 | 450 | • | • | Self-crosslinking version of Hycar 26-1199. Ultra-water resistant. |
| | Hycar® 26092 | -12 | A | 50 | 4 | 1.06 | 125 | • | • | General purpose coatings/adhesives. Saturation and wet end addition. Excellent color/heat/light stability. Book cover. |
| | Hycar® 2671 | -11 | A | 53 | 5 | 1.07 | 170 | • | • | General purpose coatings. Foamable flock adhesives with excellent durability. Good solvent and water resistance. |
| | Hycar® 26120 | -11 | A | 50 | 3.8 | 1.07 | 115 | • | | Excellent pigment acceptance. Highly redispersible. Excellent heat stability. |
| | Hycar® T-9207 | -9 | A | 60 | 2.8 | 1.08 | 280 | • | | High solids textile coatings/adhesives. Blends with Hycar T-9202. |
| | Hycar® 26871 | -7 | A | 52 | 5.7 | 1.07 | 250 | • | • | Soft, hydrophobic acrylic co-polymer emulsion with excellent adhesion to many substrates. Water and abrasion resistance in foamed and non-foamed upholstery and flock applications. |
| | Hycar® 26415 | -7 | A | 59 | 6 | 1.08 | 120 | • | • | Soft, high solids, self-crosslinking, stable polymer good for flocking and backcoatings. |
| | Hycar® 26345 | -6 | A | 50 | 3.6 | 1.07 | 20 | • | • | Foam/froth backcoatings, excellent durability to laundering/dry cleaning, excellent cold flex. |
| | Hycar® 26-0912 | -4 | A | 50 | 4 | 1.07 | 350 | • | • | Soft, inherently flame retarding acrylic polymer. |
| | Hycar® 2679 | -3 | A | 49 | 3.7 | 1.06 | 100 | • | | Fabric laminating, backcoating, flocking finishes. Good general purpose acrylic for saturation, book cover, filter paper. |
| FIRM | Hycar® 26796 | 0 | A | 48 | 5 | 1.07 | 120 | • | • | Fabric laminating adhesive. Self thickening with ammonia. Good solvent resistance. |
| | Hycar® FF26916 | +2 | A | 50 | 8.5 | 1.06 | 60 | | • | Formaldehyde-free. Excellent abrasion resistance; heat and light stable. |
| | Hycar® 26084 | +8 | A | 48 | 6.1 | 1.07 | 110 | • | • | Heat seal adhesive with excellent solvent and plasticizer resistance. |
| | Hycar® 1497 | +8 | A | 50 | 5 | - | 250 | - | • | Very soft, self-crosslinking, inherently flame retarding. High compatible with many flame retardants, fillers and plasticizers. |
| | Hycar® 26996 | +8 | A | 49 | 6 | 1.07 | - | - | | Self-crosslinking, anionic acrylic polymer with a good balance of tensile strength, elongation and solvent resistance. Excellent heat sealability. Broad FDA. |
| | Hycar® 26349 | +12 | A | 49 | 4.6 | 1.07 | 135 | • | | Extremely durable coatings/adhesives. Firm but flexible hand, book cover stock. Solvent and plasticizer resistance. |
| | Hycar® 26091 | +20 | A | 50 | 6.8 | 1.16 | 30 | • | • | Topcoatings with abrasion resistance, high gloss and color stability. Dry cleanable and washable. |
| | Hycar® 26288 | +20 | A | 50 | 4 | 1.07 | 60 | • | • | Heat sealable. FDA compliant direct food contact. Blends with Hycar 26315. |
| | Hycar® 26-1265 | +23 | A | 49 | 4 | 1.06 | 350 | | • | Ultra-water resistant. Formaldehyde-free. |
| | Hycar® 26138 | +25 | A | 49 | 5.5 | 1.07 | 60 | • | | Fabric laminating topcoatings, anti-fray. Outstanding dryclean/laundry resistance. Good thermal stability/solvent resistant. |
| STIFF | Hycar® 26-1084 | +27 | A | 40 | 4 | 1.06 | 80 | | • | Firm, excellent lightfastness, formaldehyde-free. Non-wicking, good water resistance. |
| | Hycar® 26951 | +28 | A | 44 | 8.5 | 1.06 | 100 | | • | Formaldehyde-free. Good adhesion to low-energy substrates. |
| | Hycar® 26348 | +30 | A | 48.5 | 6 | 1.07 | 200 | | • | Hydrophobic, excellent oil and solvent resistance for tape release coatings. |
| | Hycar® 26450 | +32 | A | 46 | 4 | 1.06 | 25 | • | • | Fabric stiffener. High crosslink density. Paper saturant, oil resistant. |
| | Hycar® 26172 | +33 | A | 50 | 2.5 | 1.05 | 125 | • | • | Hand builder, flame retarding finish (with salt). Blends with Hycar 26171. Self-thickening. |
| | Hycar® 26391 | +36 | A | 50 | 3.6 | 1.09 | 125 | • | • | Pleatable window shades. Hand builder. Highly water resistant, very good color. |
| | Hycar® 26256 | +45 | A | 50 | 2.5 | 1.09 | 140 | • | | Hand builder. Hard glossy topcoatings. Excellent color. |
| | Hycar® 26-1475 | +50 | A | 50 | 4 | 1.06 | 350 | | • | Ultra water resistant and stiff. Formaldehyde-free. |
| | Hycar® 26315 | +55 | A | 49.5 | 2.1 | 1.07 | 36 | • | • | Heat sealable. FDA compliant direct food contact. Blends with Hycar 26288. Excellent water resistance. |
| | Hycar® XL-250 | +72 | A | 33 | 4.2 | 1.07 | 50 | | | Heat reactive and superior wet strength. Good heat and light stability. |
| Hycar® 26459 | +103 | A | 46.5 | 3.3 | 1.04 | 15 | • | • | Crosslinkable polystyrene emulsion. Formaldehyde-free. | |



**Formaldehyde-free and versions with FDA clearances are available on select polymers.

NONIONIC ACRYLIC EMULSIONS

| ACRYLIC EMULSION | Tg (°C) | CHARGE | SOLIDS (%) | pH | SPECIFIC GRAVITY | VISCOSITY (cP) | HEAT REACTIVE | CARBOXYLATED | DESCRIPTION/SUGGESTED USES |
|------------------|---------|--------|------------|-----|------------------|----------------|---------------|--------------|--|
| PrintRite™ 595 | -20 | N | 45 | 2.7 | 1.05 | 140 | ● | | Binder for pigment printing of apparel, domestic goods, home furnishing fabrics and industrial fabrics. Suitable for pigment pad dyeing. Nonionic colloidal system offers versatility to other applications, e.g. coating and finishing. |
| PrintRite™ 2514 | -20 | A | 50 | 9 | 1.02 | 400 | | ● | Formaldehyde-free print binder. |
| PrintRite™ 9691 | n/a | N | 23 | 7 | 1.02 | 15,000 | ● | | Printable coating with conductive properties. |

ELASTOMERIC EMULSIONS

| EMULSION | Tg (°C) | CHARGE | SOLIDS (%) | pH | SPECIFIC GRAVITY | VISCOSITY (cP) | HEAT REACTIVE | CARBOXYLATED | DESCRIPTION/SUGGESTED USES |
|--------------------|---------|--------|------------|-----|------------------|----------------|---------------|--------------|--|
| Hystretch™ V-60 | -60 | A | 50 | 8 | 1.01 | 40 | ● | ● | Ultra-soft, hydrophobic, slightly tacky. Anti-skid coatings. Excellent dry tack, will not transfer. APE-free version available. |
| Hystretch™ V-43 | -43 | A | 50 | 8.5 | 1.03 | 200 | ● | ● | Very soft and elastic. Backcoatings, anti-pill, nonwoven and paper saturant. |
| Hystretch™ V-43 FF | -43 | A | 50 | 8.5 | 1.03 | 200 | | ● | Formaldehyde-free version of V-43. |
| Hystretch™ V-29 | -29 | A | 50 | 8 | 1.04 | 70 | ● | ● | Soft and elastic. Solvent resistant. Outdoor fabric coatings with excellent UV stability, dirt resistance and low temperature flexibility. APE-free version available. |

HyStretch elastomer emulsions are a Lubrizol breakthrough: patented technology yielding a unique combination of polymer properties. They are as elastic as natural rubber, yet as heat and light stable as synthetic acrylics. Creative formulators have discovered new and innovative applications based on HyStretch emulsions.



POLYURETHANE EMULSIONS

| EMULSION | CHARGE | SOLIDS (%) | pH | VISCOSITY (cP) | DESCRIPTION/SUGGESTED USES |
|-------------|--------|------------|-----|----------------|---|
| Permax™ 202 | N | 44 | 6 | 200 | Aliphatic polyether waterborne urethane polymer which provides high MVTR. Recommended in waterproof breathable fabric construction for sports wear, protective apparel, military gear, tents and footwear applications. |
| Permax™ 232 | N | 33 | 5.6 | 600 | Aliphatic polyether waterborne urethane polymer which provides high MVTR. Recommended in waterproof breathable fabric construction for sports wear, protective apparel, military gear, tents and footwear applications. |

EMULSIONS

| EMULSION | Tg (°C) | CHARGE | SOLIDS (%) | pH | VISCOSITY (cP) | SPECIFIC GRAVITY | DESCRIPTION/SUGGESTED USES |
|--------------------|---------|--------|------------|-----|----------------|------------------|--|
| Carbocure™ TSR-72 | +72 | A | 35 | 4.6 | 50 | 1.07 | Stiff, high crosslink density polymers. High temperature dimensional stability, moldability. For saturation and spray bond. Carbocure TSR-72 has excellent oil and solvent resistance. Carbocure TSR-201 has excellent wet strength and color stability. |
| Carbocure™ TSR-201 | +72 | A | 33 | 4.2 | 50 | 1.07 | |

PVC EMULSIONS

| | EMULSION | Tg (°C) | CHARGE | SOLIDS (%) | pH | SPECIFIC GRAVITY | VISCOSITY (cP) | HEAT REACTIVE | CARBOXYLATED | DESCRIPTION/SUGGESTED USES |
|-------------------------------|----------------|----------------|--------|------------|------|------------------|----------------|---------------|--------------|--|
| PVC-ACRYLIC COPOLYMER | Vycar™ 590X20 | -17 | A | 49 | 10 | 1.13 | 100 | ● | ● | Flame-retarding backcoatings with superior cost/performance vs. compounded acrylic. Vycar 590x20 is phosphate plasticized. |
| | Vycar™ FT-9 | -13 | A | 50 | 8.8 | 1.09 | 150 | ● | ● | |
| | Vycar™ 460X46 | +7 | A | 49 | 5 | 1.09 | 40 | ● | ● | |
| | Vycar™ 460X119 | +37 | A | 48 | 7 | 1.12 | 40 | ● | ● | Develops excellent cure, even at lower temperatures, with or without catalyst. Offers excellent water and chemical resistance, a range of firmness and contributes to flame retardance. Can be used for lamination, heat sealing and general saturation or spray bond. |
| | Vycar™ 460X49 | +40 | N | 50 | 5 | 1.13 | 20 | ● | ● | Exceptional mechanical stability. For spraying, padding, printing, coating, etc. Excellent water and chemical resistance. Heat sealable. |
| SPECIAL COPOLYMER | Vycar™ 460X58 | +40 | A | 49.5 | 6 | 1.13 | 20 | ● | ● | Flame retarding coatings for carpeting and furnishing fabrics, including commercial installations. Polymer system provides unique combination of low flame response/low smoke. |
| VINYLIDENE CHLORIDE COPOLYMER | Vycar™ 650X27 | -4 | A | 50 | 4.5 | 1.21 | 70 | | ● | Soft, flame retarding for backcoatings; formaldehyde-free. Moisture vapor barrier coating. |
| | Vycar™ 660X14 | +7 | A | 49 | 6 | 1.23 | 50 | ● | ● | Special flame retardant coatings. Low MVTR. |
| | Permax™ 805 | MFFT is 13.5°C | A | 60 | 1.7 | 1.21 | 80 | | ● | VDC acrylic copolymer with provides exceptionally low MVTR. For excellent corrosion and humidity resistance. |
| PVC COPOLYMER | Vycar™ 351 | +62 | A | 57 | 10.3 | 1.16 | 20 | | | Product family offers excellent wash/wear resistance, chemical resistance, firmness, flame retardance and is formaldehyde-free. Polymers can be used as is or with various plasticizer levels to control firmness. Useful as saturant spray or coating. |
| | Vycar™ 352 | +69 | A | 57 | 10.3 | 1.16 | 202 | | | |
| | Vycar™ 460X104 | +70 | A | 55 | 8 | 1.17 | 15 | | ● | Economical, stiff, flame retarding, formaldehyde-free. Moldable binder for paper saturation and fiber treatment. |
| | Vycar™ 460X95 | +73 | A | 51 | 5 | 1.15 | 20 | ● | ● | Excellent color and mechanical stability; salt stable. Can be used for lamination, heat sealing and general saturation or spray bond. Flame retarding. |
| PLASTICIZED PVC | Vycar™ 578 | +11 | A | 56.5 | 10 | 1.12 | 40 | | | Phthalate plasticized. Adhesives/coatings for vinyl. Dielectric or hot bar heat sealable. Yarn sizing. Exhibit low smoke and very low fogging tendencies (SAE test method). Formaldehyde-free. |
| | Vycar™ 580X83 | +17 | A | 56 | 10 | 1.14 | 30 | | | |
| | Vycar™ 577 | +19 | A | 56 | 10.3 | 1.09 | 17 | | | Flame retarding finishes for saturation or coating of cellulosic and synthetic fibers. Phosphate plasticized. Vycar 577 will act as dielectric and hot-bar sealable adhesive. |

VINYL ACETATE EMULSIONS

| EMULSION | Tg (°C) | CHARGE | SOLIDS (%) | pH | VISCOSITY (cP) | DESCRIPTION/SUGGESTED USES |
|----------------|---------|--------|------------|-----|----------------|---|
| Vycar™ VA-0450 | +32 | A-N | 45 | 3.8 | <400 | Self-crosslinking; provides hardness, strength and durability. Nonwoven binder. |
| Vycar™ VA-1022 | +32 | N | 56 | 5 | 1300 | General purpose polymer; good water resistance. HEC stabilized. |





POLYURETHANE DISPERSIONS

| | POLYURETHANE | TYPE | SOLIDS (%) | pH | VISCOSITY (cP) | COSOLVENT (% NMP) | 100% MODULUS (psi) | TENSILE STRENGTH (psi) | ELONGATION AT BREAK (%) | DESCRIPTION/SUGGESTED USES |
|-----------------|------------------|-----------|------------|-----|----------------|-------------------|--------------------|------------------------|--|--|
| ALIPHATIC | Sancure™ 777 | Polyester | 35 | 10 | 75 | 8.1 | 2,000 | 5,100 | 410 | Excellent adhesion to wide range of substrates including nylon and plasticizer. Can be used as binder or topcoat. Exhibiting high gloss and excellent abrasion resistance. |
| | Sancure™ 815 | Polyester | 35 | 8 | 125 | 8.5 | 4,100 | 5,450 | 220 | Excellent heat sealability and adhesion to vinyl. |
| | Sancure™ 825 | Polyester | 34 | 8.5 | 425 | 8.1 | 4,800 | 6,600 | 200 | Coating for rigid surfaces such as wood, concrete and plastics. Blends well with Carboset® acrylics. |
| | Sancure™ 835 | Polyester | 40 | 8.5 | 200 | 13.2 | 345 | 4,900 | 600 | Soft, tough polymer with excellent adhesion to a wide range of substrates. |
| | Sancure™ 843C | Polyester | 32 | 9.3 | 400 | 9.3 | 3,300 | 4,800 | 270 | Hard aliphatic urethane. Self-crosslinking gives excellent chemical resistance. For use in wood and plastic coatings. |
| | Sancure™ 861 | Polyether | 40 | 8.2 | 1,000 | 0 | 650 | 2,600 | 580 | Excellent balance of hardness, abrasion resistance and flexibility. Low VOC. Hydrolytically stable. |
| | Sancure™ 898 | Polyester | 32 | 7.8 | 200 | 7.8 | 5,125 | 6,100 | 300 | Forms very hard but flexible coatings with good stain and chemical resistance. Fine particle size. |
| | Sancure™ 899 | Polyester | 35 | 8 | 700 | 8 | 3,000 | 4,100 | 300 | Good adhesion to plasticized vinyl. Excellent UV resistance. |
| | Sancure™ 1301 | Polyester | 41 | 9 | 200 | 9.8 | 1700 | 4,000 | 320 | Good adhesion to a variety of substrates; abrasion resistant and flexible. |
| | Sancure™ 2026C | Polyester | 40 | 8.3 | 500 | 6.8 | 950 | 4,200 | 560 | Weather resistant coatings, good heat seal properties. Forms soft, flexible, clear film. Has excellent elongation and toughness. Contains no organic solvent forms. |
| | Sancure™ 2105 | Polyester | 32 | 8 | 300 | 0 | 70 | 100 | 1,680 | Very soft hand, excellent dielectric seal, low VOC. |
| | Sancure™ 2255 | Polyester | 49 | 8 | 1,500 | 8.5 | 700 | 3,300 | 550 | Soft, flexible high gloss coatings. Fast drying. |
| | Sancure™ 2715 | Polyether | 38 | 9 | 750 | 0 | 1,100 | 3,300 | 425 | Firm hand, low VOC. A tough film with fast property development. Medium hard, aliphatic polyether urethane. |
| | Sancure™ 12929 | Polyester | 40 | 8 | 1,000 | 11.2 | 220 | 2,300 | 550 | Soft textured coatings. Heat sealable at low temperatures. Soft, tough plastic coating. |
| | Sancure™ 12954S | Polyester | 32 | 8 | 75 | 9.6 | 3,600 | 3,800 | 120 | Tough, hard polymer for rigid surfaces such as wood, plastic, concrete and metal. Can be blended with a variety of acrylics. |
| | Sancure™ 13094HS | Polyether | 38 | 8 | 250 | 0 | 320 | 4,200 | 650 | Tough and excellent abrasion, water resistant coating, heat and hydrolysis-resistant. Low VOC. |
| | Sancure™ 20025F | Polyester | 48 | 8 | 500 | 0 | 300 | 4,100 | 1,000 | Low VOC, elastic polymer. Good heat sealability. |
| Sancure™ 20041 | Polyester | 45 | 8 | 100 | 0 | 3,400 | 5,200 | 330 | Low VOC, hard polymer, heat sealability. | |
| Sancure™ 20066 | Polyether | 40 | 7.5 | 60 | 8.1 | 440 | 5,000 | 680 | Excellent adhesion with wash durability, light fastness and abrasion resistance. Good hydrolysis resistance. | |
| Sancure™ 20051 | Polyether | 42 | 6 | 60 | 0 | 1,000 | 4,000 | 600 | Cationic charge; abrasion and chemical resistance; excellent humidity resistance. | |
| AROMATIC | Sancure™ 1511 | Polyester | 35 | 9 | 1,000 | 11.3 | 3,150 | 5,500 | 250 | Urethane with a good balance of hardness and flexibility. Use where UV exposure is not a concern. |
| | Sancure™ 1514 | Polyester | 35 | 8.5 | 550 | 11.4 | 4,500 | 5,000 | 160 | Hard aromatic urethane designed for blending with Carboset for trade sales wood coatings. |
| | Sancure™ 1591 | Polyether | 35 | 8.3 | 1,600 | 6 | 820 | 2,700 | 580 | Multi-purpose backcoatings and adhesives (limited heat and light stability). |
| | Sancure™ 1601 | Polyester | 35 | 8.5 | 1,500 | 11.3 | 400 | 4,525 | 550 | Heat reactivatable coating with excellent adhesion to many substrates. |
| FLAME RETARDANT | Sancure™ 1004B | Polyester | 42 | 9.5 | 500 | 14.2 | 2,100 | 3,100 | 275 | Inherently flame retarding, stiff hand. Excellent UV and heat stability. |
| | Sancure™ 1073C | Polyester | 30 | 9 | 450 | 9.9 | NA | 7,000 | 18 | Very stiff, flame retarding and stain resistant. |
| | Sancure™ 20069 | Polyester | 42 | 8 | 300 | 0 | 600 | 675 | 150 | Flame retarding, soft binder for polyester and nylon coatings. Good light fastness. Low VOC. |

PRESSURE SENSITIVE AND LAMINATING ADHESIVES

| PRODUCT | Tg (°C) | CHARGE | SOLIDS (%) | pH | VISCOSITY (cP) | DESCRIPTION/SUGGESTED USES |
|-------------------------|---------|--------|------------|-----|----------------|--|
| Carbotac™ 1811 | -43 | A | 55 | 4.5 | 120 | Low temperature, pressure-sensitive adhesive and polymer tackifier with outstanding tack and peel adhesion. |
| Carbotac™ 1814 | -30 | A | 55 | 4.5 | 80 | Pressure sensitive adhesive with moderate tack and peel performance. Suggested for use with substrates where film oil and plasticizer resistance are needed. |
| Carbotac™ 26146 | -55 | A | 51 | 7 | 100 | Acrylic pressure-sensitive emulsion with excellent adhesion to treated polyethylene and other low energy substrates. |
| Carbotac™ 26171 | -43 | A | 50 | 2.5 | 125 | General purpose adhesive with balance of tack, peel and shear. Self thickening with increasing pH. Formaldehyde-free version of Hycar 26-1771. |
| Carbotac™ 26222 | -55 | A | 50 | 8 | 70 | Acrylic pressure-sensitive adhesive with high dry tack and excellent adhesion to polyethylene and other low-energy substrates. |
| Carbobond™ 26387 | -23 | A | 61 | 5 | 275 | Durable, tough, high-solids acrylic polymer for general purpose adhesives. |
| Carbobond™ 26373 | +5 | A | 58 | 2.6 | 90 | Tough, very hydrophobic, high-solids wet laminating adhesive with high green tack. Heat sealable. |
| Performax™ 8535 | NA | NA | 48 | 9 | 8,000 | Co-solvent free, waterborne, aliphatic polyurethane adhesive compound with excellent adhesion to polyester, nylon and cotton. Can be used as a tie coat for wet or dry lamination. |



INK RECEPTIVE COATINGS

| PRODUCT | VISCOSITY | FINISH | APPLICATION METHOD | SOFTNESS | KEY FEATURE |
|--------------------------|-----------|------------|--------------------|----------|---|
| PrintRite™ DP-275 | 500 | Semi-gloss | Various | Soft | Good print density. |
| PrintRite™ DP-261 | 60 | Semi-gloss | Various | Medium | Excellent adhesion and scratch resistance on polyolefin and film substrates. |
| PrintRite™ DP 282 | 80 | Glossy | Various | Medium | Good overall print properties. |
| PrintRite™ DP-320 | 6,500 | Matte | Knife Coating | Medium | High-quality art applications. |
| PrintRite™ DP-350 | 4,000 | Glossy | Various | Medium | Good overall properties, rapid ink drying. |
| PrintRite™ DP-351 | 700 | Glossy | Various | Medium | Rapid ink drying. The low viscosity allows a wide range of application methods. |



FLAME RETARDANT ADDITIVES

| | ADDITIVE | SOLIDS (%) | pH | VISCOSITY (cP) | DESCRIPTION/SUGGESTED USES |
|-----------------------------|----------------|------------|----|----------------|--|
| FLAME RETARDANT DISPERSIONS | Performax™ 401 | 68 | 9 | 3500 | Aqueous dispersion of antimony trioxide. |
| | Performax™ 910 | 68 | 9 | 3500 | Aqueous dispersion of a proprietary brominated "deca" replacement. |
| | Performax™ 911 | 68 | 9 | 3500 | 1:1 Ratio (Performax 910 : Performax 401) |
| | Performax™ 921 | 68 | 9 | 3500 | 2:1 Ratio (Performax 910 : Performax 401) |
| | Performax™ 931 | 68 | 9 | 3500 | 3:1 Ratio (Performax 910 : Performax 401) |
| | Performax™ 941 | 68 | 9 | 3500 | 4:1 Ratio (Performax 910 : Performax 401) |
| | Performax™ 951 | 68 | 9 | 3500 | 5:1 Ratio (Performax 910 : Performax 401) |

SYNTHETIC THICKENERS FOR COATINGS AND PRINTING

| | PRODUCT | SOLIDS (%) | pH | SPECIFIC GRAVITY | VISCOSITY (cP) | DESCRIPTION/SUGGESTED USES |
|-------------------------|--------------------|------------|-----|------------------|------------------|---|
| THICKENERS FOR COATINGS | Solthix™ A100 | 30 | 3 | 1.06 | 10 | Hydrophobically modified alkali-swellable acrylic emulsion. Highly efficient with strongly shear-thinning profile. Prevents settling of inorganic particles at low dosages. |
| | Solthix™ A200 | 30 | 3 | 1.05 | 10 | Alkali-swellable emulsion thickener. Efficient, short rheology. |
| | Solthix™ A300 | 18 | 3 | 1.04 | 10 | Alkali-swellable emulsion thickener. Imparts a longer flow than Carbopol EP-1, to control penetration. |
| | Carbopol™ EP Ultra | 35 | 3 | 1.06 | 10 | Highly efficient alkali-swellable emulsion thickener. Short rheology. |
| THICKENERS FOR PRINTING | Solthix™ T21810 | 97 | 8.5 | 1.4 | (0.5%) 35,000 | Very efficient powder thickener for pigment printing applications. Generally used to make liquid concentrate fully neutralized and ready to use. |



NORTH AMERICA

Lubrizol Advanced Materials, Inc.
9911 Brecksville Road
Brecksville, OH 44141 USA
+1.800.380.5397

EUROPE

Lubrizol Limited
PO Box 42, Hexagon Tower
Blackley, Manchester
M9 8ZS United Kingdom
+44 161 721 6800

ASIA-PACIFIC

Lubrizol Specialty Chemicals
(Shanghai) Co., Ltd
10/F, Park Center International
No. 1088 Fang Dian Road
Shanghai 201204, PR China
+8621-3866-0366

SOUTH AMERICA

Lubrizol do Brasil Aditivos Ltda
Avenida Nove de Julho, 3653
Jardim Paulista
Sao Paulo – SP
01407-000
+55.11.4097.0250

Visit us at:
www.lubrizol.com/textilecoatings

WHAT WE ADD MAKES THE DIFFERENCE.™

Lubrizol is a market-driven innovator of specialty chemicals that solve today's challenges in the paints and coatings, printing and packaging, paper and textiles, plastics and composites, and digital print markets. More than just a supplier, we are a collaborator with extensive experience in surface protection, dispersion, adhesion, and barrier properties that enables us to enhance the performance, simplicity, and sustainability benefits of our customers' products. With a commitment to collaboration, applied science, and demonstrated value, our team of experts is dedicated to exceeding customer expectations for both the simplest and toughest requirements. Count on Lubrizol to make the difference.

The Lubrizol logo features the word "Lubrizol" in a bold, italicized, sans-serif font. A blue swoosh underline is positioned beneath the letters "Lubri", extending from the left and curving under the "Lubri" portion of the name.

The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained. The information is based on laboratory work with small-scale equipment and does not necessarily indicate end product performance. Because of variations in methods, conditions and equipment used commercially in processing these materials, no warranties or guarantees are made as to the suitability of the products for the applications disclosed. Full-scale testing and end product performance are the responsibility of the user. Lubrizol Advanced Materials, Inc. shall not be liable for and the customer assumes all risk and liability of any use or handling of any material beyond Lubrizol Advanced Materials, Inc.'s direct control. The SELLER MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Nothing contained herein is to be considered as permission, recommendation nor as an inducement to practice any patented invention without permission of the patent owner.

Trademarks owned by The Lubrizol Corporation or its affiliates.
©The Lubrizol Corporation 2018, All Rights Reserved.