



DORESCO®  
Solution Acrylics

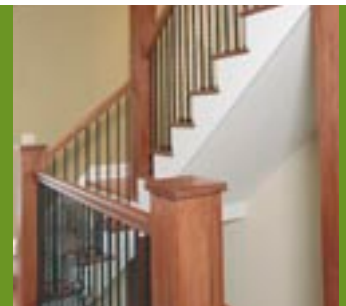
CARBOSET®  
Acrylic Emulsions

CARBOTAC™  
Acrylic Emulsions

## PRODUCT SELECTION GUIDE



## Resins and Polymers for Paints and Coatings



PERMAX™  
Vinylidene Chloride Emulsions

SANCURE™  
Polyurethane Dispersions

TURBOSET™  
Polyurethane Dispersions

CARBOSET®  
Acrylic Emulsions

CARBOTAC™  
Acrylic Emulsions





## One supplier. Many solutions.

### Industry knowledge

Lubrizol employs experienced paint, coating, ink and plastic specialists. A constant dialogue with our customers and continuous learning enables us to understand the needs of the industry and successfully work on today's and future paint, coating and plastic needs.

### Technical support

Lubrizol has fully equipped labs in Europe, the U.S. and Asia, all dedicated to helping our customers, dealing with technical questions and delivering solutions.

### Quality products

From product development to production and distribution, we carefully control all processes to ensure the quality of our products and help our customers gain a competitive edge.

### Best solution

Lubrizol specialises in providing just the right product in just the right amount to turn an ordinary coating into an extraordinary coating – at optimal cost around the globe.

### On-time delivery

Product availability and on-time delivery are vital to any business. To answer these needs, Lubrizol has a worldwide network of distribution points. This comprehensive network provides immediate access to customer service personnel.

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

# Contents

## Resins & Polymers for Paints and Coatings

Wood Coatings	4
OEM Plastics	5
Interior & Exterior Building Surfaces	6 - 7
General Industrial	8
Water Based Binders	9 - 11
Polyurethane Dispersions	12 - 13
Solvent Based Binders	14 - 15



# Wood Coatings

Lubrizol offers an in-depth line of acrylics (solutions and emulsions) and water borne polyurethane products to enhance the performance of finishes used on wood surfaces. Lubrizol backs them with experience, innovation and ingenuity to solve the most difficult application challenges. Our product offering covers following applications: floor finish topcoats, brushing varnishes, industrial wood coatings, stain blocker primers and wiping stains.

PRODUCT	CARBOSET® 510	CARBOSET® CR-728	CARBOSET® CR-717	CARBOSET® CW-7104	CARBOSET® XPD-2790	DORESCO® OH701B (BA/Xyl 1:1)
<b>WOOD COATINGS – APPLICATION MATRIX</b>						
Polymer type	Acrylic Colloidal Dispersion	Acrylic Self-X-linking	OH-functional Acrylic	Styrene-Acrylic Self-X-linking	Styrene-Acrylic	OH-functional Acrylic
APE-free	yes	yes	no	yes	no	–
MFFT in °C	3	45	26	41	10	–
Floor Finishes				with SANCURE™ 20041 or 825		
OEM Furniture Coatings						2K
Brushing Varnishes						
Wiping Stains						
Stain Blocking Primers						
water borne products						
solvent based products						

PRODUCT	SANCURE™ 815	SANCURE™ 825	SANCURE™ OM-945	TURBOSET™ 2025	SANCURE™ AU-4010	SANCURE™ 20041
<b>WOOD COATINGS – APPLICATION MATRIX</b>						
Polymer type	Aliphatic Urethane	Aliphatic Urethane	Aliphatic oil modified Urethane	Aliphatic Urethane	Hybrid Self-X-linking	Aliphatic Urethane
APE-free	yes	yes	yes	yes	no	yes
NMP % (del form)	8.4	8.3	2.9	1.0	5.4	0
NEP % (del form)	–	–	–	4.3	–	0
MFFT in °C	–	–	10	5	0	–
Floor Finishes	& 2K	& 2K				& 2K
OEM Furniture Coatings						
water borne products						
solvent based products						

# OEM Plastics

Lubrizol's line of water borne acrylics and polyurethanes are ideal for interior automotive and consumer electronic applications. Our interior automotive lacquers provide protection against wear on instrument panels, consoles and door handles. Our binders provide a soft tactile feeling and abrasion resistance on arm rests, air bag covers, consoles and dashboards. Coatings for semi-rigid and flexible surfaces provide excellent adhesion, chemical and abrasion resistance and aesthetics.

PRODUCT	SANCURE™ 2026	SANCURE™ 20037	CARBOSET® CR-763	DORESCO® HS4 (BA)	DORESCO® OH190BA (BA)
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## OEM PLASTICS – APPLICATION MATRIX

Polymer type	Aliphatic Urethane	Aliphatic Urethane	Styrene-Acrylic	OH-functional Acrylic	OH-functional Acrylic
APE-free	yes	yes	no	–	–
NMP % (del form)	6.9	0	–	–	–
MFFT in °C	–	–	55	–	–
OEM Automotive Coatings				2K	2K
OEM Automotive Soft-Touch Coatings					
Consumer Electronics Coatings					

water borne products

solvent based products

# Interior & Exterior Building Surfaces

Lubrizol products meet the demanding needs of architectural (decorative) interior and exterior coatings. They provide exceptional scrub resistance, good exterior durability, good flow and levelling, tannin and stain blocking and superior wet adhesion. Our product offering covers following applications: roof and masonry coatings, exterior wood and concrete coatings as well as construction specialties.

PRODUCT	CARBOSET® CR-785	CARBOSET® CA-7100	CARBOSET® CA-7107	CARBOSET® CA-7121	CARBOSET® CA-7160	CARBOSET® CA-7147	CARBOSET® AE-960
<b>INTERIOR &amp; EXTERIOR BUILDING SURFACES – APPLICATION MATRIX</b>							
Polymer type	Styrene-Acrylic	Styrene-Acrylic	Acrylic	Styrene-Acrylic	Styrene-Acrylic	Acrylic	Acrylic
APE-free	no	yes	yes	yes	yes	yes	yes
Ammonia free	no	no	no	yes	no	no	yes
MFFT in °C	44	0	0	0	21	6	0
Masonry		with CA-7160			with CA-7100		
Outdoor/facade & pastel/deep colours							
Semi gloss paints							
Flat indoor paints							
High PVC paints							
Roof coatings		with CA-7160			with CA-7100		
Concrete membranes							
Sport courts							
Outdoor floors							
Concrete garage floor							
water borne products							
solvent based products							

PRODUCT	CARBOSET® 560	CARBOSET® PL-958	CARBOTAC™ 1811	CARBOSET® XPD-2860	CARBOSET® 7700	CARBOSET® 7733
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### INTERIOR & EXTERIOR BUILDING SURFACES – APPLICATION MATRIX

Polymer type	Acrylic	Acrylic	Acrylic	Acrylic	Styrene-Acrylic	Acrylic
APE-free	yes	yes	no	yes	no	yes
MFFT in °C	17	< 3	0	< 5	7	21
<b>Cement / Concrete:</b>						
Cement Bonding						
<b>Architectural / DIY / Wood:</b>						
Exterior High Gloss						
Exterior Semi Gloss						
Joinery						
<b>Ceramic tiles:</b>						
Good adhesion properties						
<b>Metal / Plastic / Glass:</b>						
Peelable coatings						
Temporary coatings						

water borne products

solvent based products

PRODUCT	DORESCO® T5T60 (To)	DORESCO® T6T (To)	DORESCO® M6A (Xyl)	Water based alternatives available
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### INTERIOR & EXTERIOR BUILDING SURFACES – APPLICATION MATRIX

Polymer type	Thermoplastic Solution	Thermoplastic Solution	Thermoplastic Solution	
Outdoor/facade & pastel/deep colours				CA-7107
Concrete membranes				CA-7147
Sport courts				CA-7147
Swimming pools				
Medium traffic road markings				
High traffic road markings				

water borne products

solvent based products

# General Industrial

Lubrizol offers an in-depth line of acrylics (solutions and emulsions) and vinyl chloride products to enhance the protection of metal surfaces. Lubrizol backs them with experience, innovation and ingenuity to solve the most difficult application challenges. Our product offering covers following applications: adhesion to galvanised iron, direct-to-metal, maintenance coatings and anti-corrosive primers.

PRODUCT	CARBOSET® CR-760	CARBOSET® CR-765	CARBOSET® CI-7242	PERMAX™ 803	DORESCO® HS4 (BA)	DORESCO® OH60 (IMPA/Xyl)	DORESCO® OH65 (Xyl)	DORESCO® CI7208 (Xyl)
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## GENERAL INDUSTRIAL – APPLICATION MATRIX

Polymer type	Styrene-Acrylic	Styrene-Acrylic	Acrylic	Vinylidene Chloride	OH-functional Acrylic	OH-functional Acrylic	OH-functional Acrylic	Thermoplastic Solution
APE-free	no	yes	yes	no	–	–	–	–
MFFT in °C	23	34	24	9	–	–	–	–
Maintenance Coatings							2K	
Direct-To-Metal (DTM)								
Adhesion on Galvanised Iron								
Anti-corrosive Primer								
Machinery Agricultural equipment						2K		
Clear/pigmented topcoat for car re-finish, aerospace, bridges					2K			

water borne products

solvent based products

## Water Based Binders

Lubrizol manufactures emulsions that are aqueous, anionic, emulsion-polymerised dispersions of acrylate copolymers. These represent Lubrizol's most varied product lines with broad range of glass transition temperatures (-30 to 103 °C). The products also offer excellent adhesion characteristics and chemical resistance. In general, acrylic emulsions are used for their resistance to heat and UV discolouration, good initial colour and clarity and good overall durability.

### CARBOSET® Specialty Acrylic Emulsions

State-of-the-art synthesis capabilities allow Lubrizol to engineer emulsions to meet the most critical performance demands. Computerised process control, statistical modelling and the ability to utilise virtually thousands of monomer combinations provide the research scientist with the appropriate tools for innovation. CARBOSET® Acrylic Colloidal Dispersions are intermediate molecular weight (MW) colloidal dispersions that strike a balance between the resistance properties associated with high MW emulsions and the pigment wetting and rewetability (alkaline solubility) properties of low MW solution acrylics.

### PERMAX™ Polymers

Lubrizol's line of vinylidene chloride emulsions are aqueous anionic dispersions of vinylidene chloride and copolymers produced by emulsion polymerisation.

Due to their nature, they offer excellent adhesion properties to various substrates. Applications for the vapour barrier properties of the PERMAX™ 803 Emulsion include thick film maintenance primers, underbody/under hood automotive coatings, rust converters and general purpose moisture barrier coatings.

### CARBOTAC™ Acrylic Emulsions

CARBOTAC™ Emulsions are acrylic based polymers designed for adhesives in the broadest sense. These polymers offer many features including a wide range of adhesive properties or solvent/plasticiser resistance.

PRODUCT	TYPE	SOLIDS CONTENT %	VISCOSITY (mPas) at 25°C	pH	MFFT (°C)	SECTOR	APE-FREE	APPLICATIONS
<b>EMULSIONS</b>								
CARBOSET® 510	Acrylic	40	1,000	7	3	W	✓	Ideal for wiping stains that will be topcoated; resoluble polymer provides excellent lapping resistance
CARBOSET® 560	Acrylic	27	200	7.6	17	I	✓	Temporary automotive and aircraft coatings
CARBOSET® 7700	Styrene / Acrylic	42	125	8.5	7	D		Resin with good gloss development in pigmented systems; ideal for water based enamels with very low VOC; non-blocking, good adhesion to glossy ceramic
CARBOSET® 7733	Acrylic	50	500	8	21	D	✓	Semi-gloss and gloss enamels
CARBOSET® AE-960	Acrylic	55	2,000	8.5	0	C	✓	Binder for elastic facade paints, shows good crack bridging properties
CARBOSET® CA-7100	Styrene / Acrylic	48	9,000	8.3	0	D	✓	Resin of high elasticity for the manufacturing of very elastic paints and roof coatings in combination with CARBOSET® 7160; excellent adhesion to wet surfaces and outstanding water resistance
CARBOSET® CA-7107	Acrylic	48	80	8.5	0	C	✓	High quality elastic paints for facades with very low VOC; no chalking with deep colours
CARBOSET® CA-7121	Styrene / Acrylic	49	8,250	8.5	0	C	✓	Resin of medium elasticity especially developed for the manufacturing of elastic coatings and roof coatings; excellent adhesion to wet surfaces and outstanding water resistance
CARBOSET® CA-7147	Acrylic	47	500	8.5	6	C	✓	Paints with high resistance to water for outdoors, no chalking; facades, curing concrete membranes, concrete sport courts
CARBOSET® CA-7160	Styrene / Acrylic	49	11,250	8.3	21	C	✓	Washable cost effective paints for indoors and outdoors; excellent adhesion and water resistance; to be combined with CARBOSET® 7100 for roof coatings
CARBOSET® CI-7242	Acrylic	45	1,000	8.5	24	D	✓	Monolayer gloss enamels with great adherence and mechanical properties on galvanised iron
CARBOSET® CR-715	Acrylic	40	60	8.4	38	W		For brushing varnishes or low traffic floor coatings; outstanding clarity and chemical resistance; rapid hardness development
CARBOSET® CR-717	Hydroxy-functional Acrylic	38	35	5	26	W		Hydroxyfunctional resin (1.6% OH) to be combined with hydrophilic isocyanate (BAHYDUR® 3100); sanding sealers and topcoats for high quality furniture
CARBOSET® CR-728	Acrylic	42	25	8	45	W	✓	Self-crosslinking emulsion with good resistance properties; for sealers and topcoats on wood (interior)

C: Construction D: Decorative I: Industrial P: Plastic W: Wood

PRODUCT	TYPE	SOLIDS CONTENT %	VISCOSITY (mPas) at 25°C	pH	MFFT (°C)	SECTOR	APE-FREE	APPLICATIONS
<b>EMULSIONS</b>								
CARBOSET® CR-760	Styrene / Acrylic	41	285	7.5	23	I		Universal monolayer gloss enamels
CARBOSET® CR-761	Styrene / Acrylic	42	50	8	37	I		Universal monolayer gloss enamels
CARBOSET® CR-763	Styrene / Acrylic	42	125	8	55	P / W / I		Good adhesion to plastics, metals and wood; excellent block resistance and compatibility with metallic pigments
CARBOSET® CR-765	Styrene / Acrylic	42	75	8.2	34	I	✓	High gloss enamels for general industry; adhesion to steel, aluminium and galvanised iron
CARBOSET® CR-781	Acrylic	41.5	25	9	70	P		Self-crosslinking resin with excellent adhesion to plastics, early hardness development and good chemical resistance
CARBOSET® CR-785	Styrene / Acrylic	42.5	40	8	44	C / I		Glossy enamels resistant to gasoline, for concrete floors and general industry; excellent for curing concrete membranes
CARBOSET® CW-7104	Styrene / Acrylic	41	< 150	8.5	37	W	✓	Self-crosslinking acrylic emulsion for clear and pigmented base and top coatings for wood; varnishes for parquet; recoatability with solvent based alkyd enamels
CARBOSET® PL-958	Acrylic	47	30	8	< 3	I	✓	Clear or pigmented peelable coatings; excellent release from a variety of substrates; good tensile and elongation; extremely low VOC coatings; good for spray booth coatings, temporary product protection
CARBOSET® XPD-2790	Styrene / Acrylic	46	500	8.5	10	C / D / W		Interior/exterior stain-blocking primer
CARBOSET® XPD-2860	Acrylic	50	500	8	< 5	D	✓	Glossy and satin enamels with low VOC (< 50 g/l)
CARBOTAC™ 1811	Acrylic	55	120	4.5	0	C		Binds cement, concrete and chalk, improves the adherence between new and old cement and concrete
PERMAX™ 803	Vinyl / Acrylic	59	50	2	9	I		Anticorrosive primers, rust converters, intumescent paints

C: Construction D: Decorative I: Industrial P: Plastic W: Wood

## Polyurethane Dispersions

Polyurethane dispersions from Lubrizol are aqueous, surfactant-free dispersions of carboxylated polyurethane polymers. They offer a range of properties that include adhesion to a variety of substrates, good flexibility and crosslinking.

### SANCURE™

SANCURE™ Water Borne Polyurethane Dispersions are used in a variety of technical and industrial applications in over 15 market areas. Used in wood coatings, SANCURE™ polymers consistently add value to your products.

Our SANCURE™ products are constantly analysed to optimise and enhance polymer properties for specific applications, ranging from abrasion resistance to soft-feel appearance. Most SANCURE™ polyurethanes may be used alone or blended with other polymers to increase toughness, adhesion, low temperature flexibility, etc.

### TURBOSET™

TURBOSET™ 2025 Urethane Dispersion is transforming the way formulators and contractors use wood coatings by eliminating additional crosslinkers. A one-component product, TURBOSET™ 2025 urethane dispersion delivers the performance of a two-component system without any additional crosslinkers. It demonstrates exceptional floor-wear characteristics, including resistance to abrasion, household stains and cleaners.

PRODUCT	TYPE	SOLIDS CONTENT %	VISCOSITY (mPas) at 25°C	pH	% NMP	SECTOR	APPLICATIONS
<b>POLYURETHANE DISPERSIONS</b>							
SANCURE™ 815	Urethane / Aliphatic	35	125	8	8.4	W	Used for general wood coatings; exhibits excellent gloss
SANCURE™ 825	Urethane / Aliphatic	34	425	8	8.3	W	Coatings for rigid substrates such as wood that require good abrasion and water resistance
SANCURE™ 2026	Urethane / Aliphatic	40	500	8	6.9	P	Coatings for plastic flexible substrates; good adhesion to a variety of substrates
SANCURE™ 20037	Urethane / Aliphatic	38	500	7.5	0	P	Coatings for plastic flexible substrates; flame-retarding
SANCURE™ 20041	Urethane / Aliphatic	34	200	8	0	W	NMP-free aliphatic polyurethane for floor finishes and brushing varnishes providing excellent resistance properties
SANCURE™ AU-4010	Urethane / Aliphatic Acrylic	36	75	8	5.3	W	Self-crosslinking resin; non-yellowing high quality varnishes for parquet, with high abrasion resistance
SANCURE™ OM-945	Aliphatic Oil Modified Urethane	45	500	8	2.9	W	For residential and commercial wood floor finishes; line-marking paints for sport floors; non-yellowing
TURBOSET™ 2025	Urethane / Aliphatic	36	500	8.2	1.0 + 4.3% NEP	W	Self-crosslinking, nano-sized resin; for professional contractor-applied, 1K hardwood floor finishes for high foot-traffic; excellent floor-wear and chemical resistance

P: Plastic W: Wood

## Solvent Based Binders

### DORESCO® Solution Acrylic Polymers

DORESCO® hydroxyl functional thermosetting acrylic polyols provide excellent gloss retention, abrasion resistance for 2K isocyanate crosslinked high-performance coatings for use on a variety of plastic, wood and metal substrates. They also provide excellent adhesion to galvanised iron. DORESCO® Acrylic Polymers can be used in exterior automotive coatings for refinish, bumpers, fascia and wheel covers; in coatings for consumer electronics and helmets and in consumer aerosol and brushable paints for plastics.

PRODUCT	SOLIDS CONTENT %	SOLVENT TYPE	VISCOSITY (mPas) at 25°C	ACID NUMBER (mg KoH)	SECTOR	APPLICATIONS
<b>THERMOPLASTIC ACRYLIC RESINS</b>						
DORESCO® CA7099	60	Xylene	600	5 - 10	D	Non-yellowing high gloss enamels; external architectural paints
DORESCO® CI7208	49	Xylene	750	< 10	I	Glossy enamels with direct adherence to galvanised iron
DORESCO® M6A	50	Xylene	5,700	5 - 10	I / D	Suitable for different uses, on its own or in combination with other family resins; paints for metals, construction, swimming pools, etc.
DORESCO® M12BR	51	Xylene / MIBK (3:1)	1,100	< 15	I	Glossy enamels with direct adherence to galvanised iron
DORESCO® P6C	53	MEK / MIBK / Toluene (2:2:1)	5,000	0 - 2	I	Ideal for painting plastics; adhesion to PS with good resistance to alcohol, adhesion primers for PP mixed with chlorinated polyolephines
DORESCO® T5T60	60	Toluene	7,000	3 - 10	T	Road-marking paints for medium traffic intensity; internally plasticised the version of DORESCO® T-6T
DORESCO® T6T	50	Toluene	3,700	5 - 10	T	Road-marking paints for high traffic intensity

D: Decorative I: Industrial T: Traffic Paints

PRODUCT	SOLIDS CONTENT %	SOLVENT TYPE	VISCOSITY (mPas) at 25°C	OH % SOLIDS	SECTOR	APPLICATIONS
<b>HYDROXYLATED ACRYLIC RESINS</b>						
DORESCO® HS4	71	Butyl Acetate	10,700	4.3	I	High solids resin; clear top-coat of an extreme quality for aerospace, car repair and plastics for the car industry
DORESCO® OH190BA	45	Butyl Acetate	5,000	3	I	Resin with a high molecular weight, with good adherence to plastics; excellent for metallising base coats
DORESCO® OH60	60	Methoxypropyl Acetate / Xylene (1:1)	1,800	3	I	Versatile resin for general industry with good flexibility, hardness and gloss; especially enamels for metals and plastics
DORESCO® OH65	60	Xylene	2,000	2	I	Pigmented systems for maintenance; excellent value for money
DORESCO® OH70IB	51	Butyl Acetate / Xylene (1:1)	4,800	2	W	Fast drying resin with good gloss and hardness for pigmented and clear systems; maximum compatibility with Desmodur HL

I: Industrial W: Wood



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