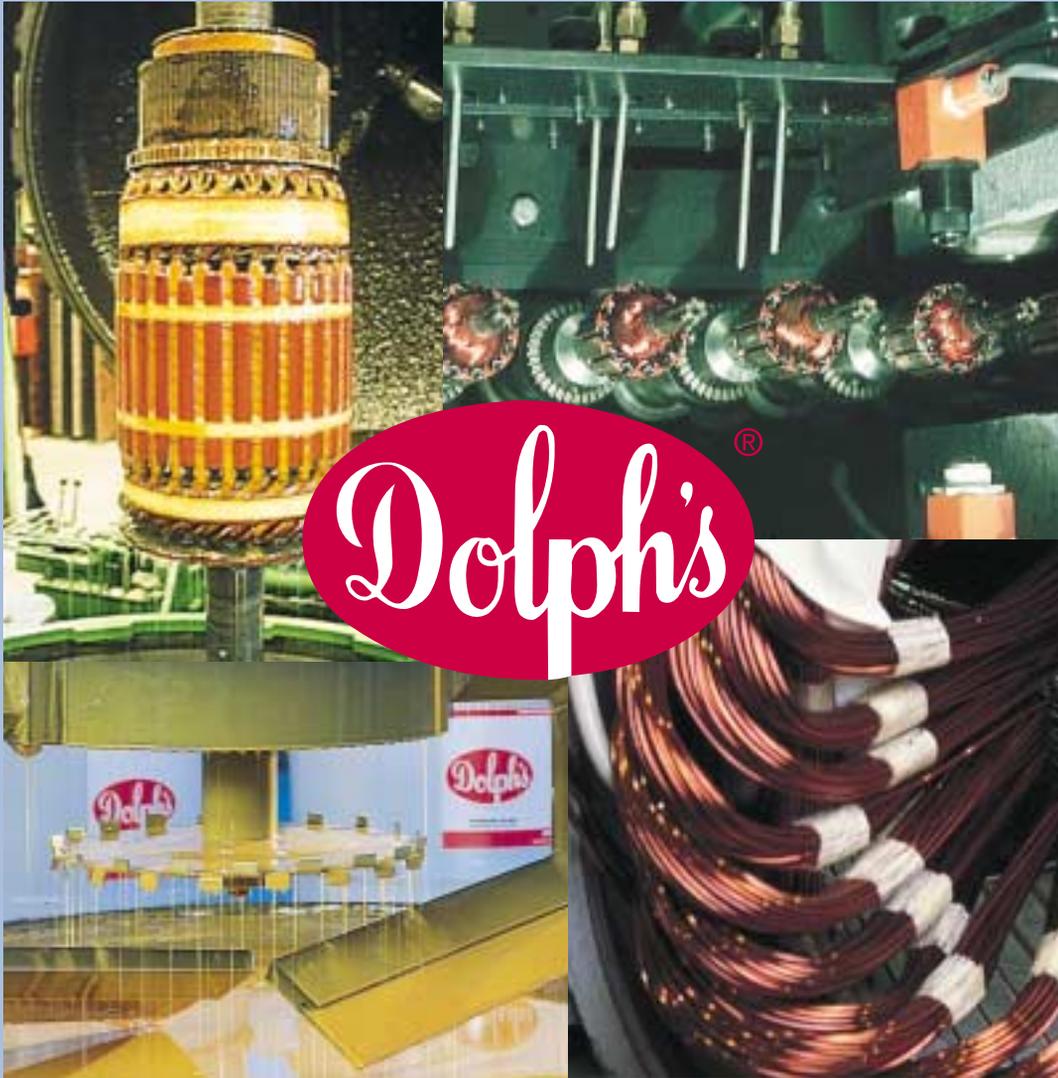


NEW
REVISED
EDITION

SELECTION CHART



Dolphin[®]

IMPREGNATING
VARNISHES & RESINS

FORMULATED SPECIFICALLY FOR THE
ELECTRICAL AND ELECTRONICS INDUSTRY

	PRODUCT	PRODUCT FEATURES	TYPICAL VISCOSITY CPS @ 25°C	THINNER/REDUCER	FLASH POINT °F/°C	FILM BUILD MILS	CURING CYCLE: HOURS BAKED (CURING CYCLE ONCE UNIT REACHES TEMP.)	DIELECTRIC STRENGTH (VOLTS/MIL) ASTM D 115 DRY/WET	BOND STRENGTH (LBS.) ATSM D 2519		UL RECOGNIZED INSULATION SYSTEMS					
									25°C	150°C	130°C	155°C	180°C	200°C	220°C	
THERMOSETTING BAKING VARNISHES	HI-THERM BC-325	High bond strength, fast-cure, gives a mar-proof film and has low outgassing.	80 - 150	T-100	45° / 7°	2.5 - 3.5	0.5-4 @	250° - 325° F 120° - 165° C	3400/ 2800	35	4.5			✓	✓	
	HI-THERM BC-340	Flexible, tough film, high bond strength; especially good for form-wound coils; meets MIL-I-24092D.	105 - 320	T-50	81° / 27°	0.1 - 2.0	0.5-4 @	275° - 325° F 135° - 165° C	4100/ 2900	35	5.0			✓	✓	
	HI-THERM BC-346-A	High temperature (220°C) varnish: tough, flexible, and QPL and UL recognized; meets MIL-I-24092D. Class 180 for processing at land-based facilities.	150 - 320	T-200-X T-100	54° / 12°	2.0 - 3.0	1-5 @	275° - 325° F 135° - 165° C	4000/ 2900	28	2.5	✓	✓	✓	✓	✓
	HI-THERM BC-350	High bond strength, flexible, polyester varnish; meets MIL-I-24092D.	170 - 350	T-200-X	81° / 27°	3.0 - 4.0	0.5-3 @	275° - 350° F 135° - 175° C	4200/ 3400	35	5					
	DOLPHON BC-352	Class H epoxy varnish: excellent for hermetic applications (R-22); high bond strength; outstanding moisture and chemical resistance.	120 - 180	T-352	81° / 27°	1.5 - 2.0	2-6 @	325° - 350° F 165° - 175° C	4600/ 3600	55	18			✓	✓	✓
	HI-THERM BB-353	High temperature resistance, glossy black version of BC-346-A with excellent appearance.	300 - 400	T-100 T-200-X	50° / 10°	N/A	1-5 @	275° - 325° F 135° - 165° C	2600/ 2400	28	2.5	✓	✓	✓	✓	✓
	HI-THERM BC-359	Energy-saving, solderable, fast cure/low temperature cure varnish: flexible with superior moisture, chemical, and abrasion resistance. Also available in low viscosity, BC-359MS.	180 - 340	T-100	45° / 7°	2.0 - 2.5	0.5-10 @	230° - 325° F 110° - 165° C	3100/ 3000	28	3.5	✓	✓	✓	✓	✓
	AQUA-THERM BC-365-LTC	Water-based, environmentally-friendly, easy-to-use, fast curing varnish: low viscosity, excellent moisture resistance, flexible.	1000 - 4000	Water	>200° / >93°	1.5	1-6 @	275° - 325° F 135° - 165° C	1900/ 1850	30	10			✓	✓	✓
SOLVENTLESS DIP AND BAKE RESINS	DOLPHON CC-1105	Solventless high flash, unsaturated polyester, extra high bond strength, fast cure; minimum clean-up. Resists refrigerants (R-123, R-134A, R-22) Bake 6 hours at 325°F for maximum hermetic resistance.	400 - 1200	VSR-3015	>200° / >93°	0.25 - 0.5	0.25-12 @	275° - 350° F 135° - 175° C	4300/ 3800	42	20	✓	✓	✓	✓	✓
	DOLPHON CC-1105-HTC	Solventless, unsaturated polyester resin: high thermal conductivity, high bond strength, good with inverter duty and hermetics applications.	1200 - 1600	VSR-3015	>200° / >93°	1.5 - 2.0	.05-8 @	275° - 350° F 135° - 175° C	2500/ 1200	44	21	✓	✓	✓	✓	✓
	DOLPHON CC-1133	Flexible, one-part solventless unsaturated polyester: offers reduced emissions, excellent appearance, good electrical properties; good for VPI and dip applications; noise reduction and resilient.	300 - 700	VR-3017	128° / 53°	1.0 - 2.0	1-2 @	300° - 325° F 150° - 165° C	3500/ 2200	35	10	✓	✓	✓	✓	✓
	DOLPHON CC-1141	Unique epoxy modified resin: dip and bake or VPI; excellent electrical properties & moisture resistance; good with hermetics (freon 22 resistant).	1500 - 3000	None	>200° / >93°	1.0 - 2.5	1-5 @	300° - 350° F 150° - 175° C	3800/ 3200	35	15	✓	✓	✓	✓	✓
	DOLPHON CC-1157	Solventless, unsaturated polyester resin; high build, resilient film. Outstanding sound suppression and excellent electrical properties.	900 - 1200	VR-3017	128° / 53°	1.5 - 2.0	1-2 @	300° - 325° F 150° - 165° C	3500/ 2200	35	8	✓	✓	✓	✓	✓
	DOLPHON CC-1305	Solventless, high-flash, unsaturated polyester: nonflammable, flexible, higher build and low emissions.	1000 - 2500	VSR-3015	>200° / >93°	0.5 - 1.0	1-2 @	300° - 325° F 150° - 165° C	4400/ 3600	40	12	✓	✓	✓	✓	✓
	XL-2102	Solventless, high-flash, unsaturated polyester: no styrene, vinyl toluene, DAP, no formaldehyde releasing compounds, low emissions, excellent tank stability.	250 - 650	None	>200° / >93°	0.25 - 0.5	1-2 @	300° - 325° F 150° - 165° C	3250/ 2890	29	9.0	✓	✓	✓	✓	✓
	XL-2103	Thixotropic, solventless, high-flash, unsaturated polyester: no styrene, vinyl toluene, DAP, no formaldehyde releasing compounds, low emissions, excellent tank stability.	*4000 - 5000 1500 - 1900	None	>200° / >93°	1.5 - 2.0	1-2 @	300° - 325° F 150° - 165° C	3000/ 2750	26	8.0	✓	✓	✓	✓	✓
XL-2105	Low viscosity, solventless, high-flash, unsaturated polyester: no styrene, vinyl toluene, DAP, no formaldehyde releasing compounds, low emissions, excellent tank stability.	220	None	>200° / >93°	0.25 - 0.5	1-2 @	300° - 325° F 150° - 165° C	3250/ 2890	29	9	✓	✓	✓	✓	✓	
AIR DRY VARNISHES	SYNTHITE AC-41	Tough, flexible, protective, fast-drying product: moisture, salt spray, and chemical resistant; excellent conformal coating, good adhesion and solderability.	150 - 250	T-200-X	81° / 23°	1.0 - 1.5	0.5 @	70° F 25° C	2000/ 1200	N/A	N/A			✓		
	SYNTHITE AC-43	Fast-processing, good conformal coating, air dry or bake applications; forms no skin, solderable.	20 - 70	T-200-X	54° / 12°	1.0 - 1.5	0.5 @	70° F 25° C	2000/ 1200	N/A	N/A	✓	✓			
	SYNTHITE AC-43-66	Fast-processing, air dry, solderable product: excellent heat, acid, and alkali resistance; low VOC's; Rule 66 compliant. Also available in black, EB-43-FB	20 - 70	T-100	50° / 10°	2.0 - 3.0	0.5 @	70° F 25° C	2000/ 1200	N/A	N/A	✓	✓			
	SYNTHITE AC-46**	Fast-drying, fungicidal, polyurethane: excellent conformal coating, superior moisture and chemical resistance, has UV tracer, and is available in spray.	150 - 200	T-200-X	81° / 23°	1.0 - 1.5	0.5 @	70° F 25° C	2000/ 1200	N/A	N/A					
INSULATING LACQUERS	LC-705**	Excellent, fast-drying waterproof coating for deflection yokes, RF coils, PC boards, etc. Fast curing. (spray available).	1100 - 1300	T-220	45° / 7°	4.0 - 7.0	0.5 @	70° F 25° C	1500/ 800	N/A	N/A					
	LV-742	Tough, flexible, and high-build green insulator: excellent conformal coating; can replace tape wrap; ideal for auto starter field coils.	1200 - 2500	T-200-X	0° / -18°	10 - 12	0.5 @	70° F 25° C	3800/ 3200	N/A	N/A					
INSULATING ENAMELS	SYNTHITE ER-41	Class F insulator: Red, tough, flexible, and fast drying; abrasion, chemical and moisture resistant film; solderable (spray available).	200 - 400	T-200-X	81° / 23°	1.5 - 2.0	0.5 @	70° F 25° C	2000/ 1200	N/A	N/A					
	SYNTHITE EB-41	Same as ER-41 with satin black finish (spray available).	200 - 400	T-200-X	81° / 23°	1.5 - 2.0	0.5 @	70° F 25° C	2000/ 1200	N/A	N/A					
	SYNTHITE ER-44	Red, tough, flexible, low cost, fast drying, chemical and moisture resistant film.	250 - 400	T-200-X	81° / 23°	N/A	0.5 @	70° F 25° C	2000/ 1200	N/A	N/A					
	SYNTHITE EB-43-FB	Same capabilities as AC-43 with flat black finish: good for air dry applications of transformers, coils, and power supplies.	150 - 200	T-200-X	50° / 10°	2.5 - 3.5	1 @	70° F 25° C	1500/ 900	N/A	N/A	✓	✓			
MASKING & SEALING COMPOUNDS	MY-739	Masking compound for finished metal surfaces during application and baking of varnishes and compounds. Use for commutators, shafts, flanges, gears & screw threads, etc.	N/A	T-25	<20° / <-7°	N/A	0.5 @	70° F 25° C	Registered Trademarks HI-THERM® AQUA-THERM® DOLPHON® SYNTHITE® DOLFLEX®							
	MN-743	Easy-to-apply, easy-to-clean up thermosetting masking compound for finished metal surfaces during application and baking of solventless resins.	N/A	None	88° / 31°	N/A	0.1 @	212° F 100° C	The recommendations, test results and suggestions are offered herein as a guide in the selection of these materials and are not a guarantee of their performance inasmuch as the company has no control over the use to which others may put the product. Data sheets are available for each of these materials and it is recommended they be consulted before a final selection is made.							
	DOLFLEX CC-1022	Thermosetting masking compound product: paste consistency; works well with vertical surfaces and irregular parts; good adhesion.	N/A	None	475° / 245°	N/A	0.5 @	275° F 135° C	The above properties are typical values and not intended for specification use.							
	CW-340-1	Class F putty-like thermosetting sealing compound: protects end turns, fills commutators, etc.	N/A	T-50	81° / 23°	N/A	2-4 @	285° F 141° C								

* Thixotropic; viscosities at 1 RPM and 10 RPM

** For Military Applications consult ASTM D3955 and D295-58

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