REICHHOLD

PRODUCT BULLETIN

June 2006

DION® 9500

Rubber Modified Vinyl Ester Resin

DESCRIPTION

DION® 9500 is a non-accelerated, rubber modified epoxy based vinyl ester resin. This resin possesses a unique combination of properties such as high tensile elongation, good toughness, low shrinkage and low exotherm. It also demonstrates excellent adhesion properties and good chemical resistance. These properties make this vinyl ester well suited as a primer and for applications subjected to dynamic loads.

APPLICATION

- DION® 9500 is well suited for hand lay-up and spray-up applications as well as other fabricating techniques. It may also be used as a primer on high density PVC foam, carbon steel and other dissimilar substrates.

FEATURES	BENEFITS
• Rubber modified epoxy vinyl ester resin	• Good chemical resistance to a wide variety of corrosive environments
• High strength and toughness	• Good mechanical properties • High elongation and crack resistance • Good fatigue resistance
• Excellent hydrolytic stability	• Very low water absorption
• Low viscosity	• Improved glass fiber wet-out
• Good curing characteristics	• Positive final cure, even with extended gel times
• Excellent fiberglass wetout	• Minimizes voids and resin-starved areas • Easy maintenance of resin-to-glass ratios
• Manufactured using statistical process controls in ISO 9002 certified plants	• Consistent batch-to-batch performance

The information herein is general information designed to assist customers in determining whether our products are suitable for their applications. Our products are intended for sale to industrial and commercial customers. We require customers to inspect and test our products before use and to satisfy themselves as to contents and suitability for their specific applications. We warrant that our products will meet our written specifications. **Nothing herein shall constitute any other warranty express or implied, including any warranty of merchantability or fitness for a particular purpose**, nor is any protection from any law or patent to be inferred. All patent rights are reserved. The exclusive remedy for all proven claims is limited to replacement of our materials and in no event shall we be liable for special, incidental or consequential damages.

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TYPICAL PROPERTIES

PHYSICAL DATA[1] IN LIQUID FORM AT 77°F

		Value
Viscosity, cps*		500
Specific Gravity		1.10
% NV		59 +/- 2.0
Flash Point, Seta Closed Cup		89
SPI Gel Time @ 180°F	Gel Cure Peak Exotherm	7:00 – 24:00 1:00 – 4:00 320° - 392°F

* Brookfield LVF viscometer, #3 spindle at 60 rpm

TYPICAL MECHANICAL PROPERTIES[1]

	ASTM Test Method	1/8" Clear Casting	Glass Mat Laminate*
Barcol Hardness, Model 934-1	D-2583	35	--
Heat Deflection Temperature (HDT), ºF	D-648	189	--
Flexural Strength, psi	D-790	19580	31183
Flexural Modulus, $x10^5$ psi	D-790	4.40	10.7
Tensile Strength, psi	D-638	10153	19580
Tensile Modulus, x 10^5 psi	D-638	4.50	11.0
Tensile Elongation @ Yield, %	D-638	9.0	2.3

***33% Glass Content**

STORAGE

DION® 9500 products are available in non-returnable 55-gallon metal drums (452 lb.net) or 40,000-44,000-lb. tank trucks. **NOTE:** DION 9500 may have minimum order quantity restrictions. For more information, contact your ***REICHHOLD*** Sales Representative or Authorized ***REICHHOLD*** Distributor.

To ensure maximum stability and maintain optimum resin properties, resins should be stored in closed containers at temperatures below 75°F (25°C) and away from heat sources and sunlight. All storage areas and containers should conform to local fire and building codes. Drum stock should be stored away from all sources of flame or combustion. Inventory levels should be kept to a reasonable minimum with first-in, first-out stock rotation.

Additional information on handling and storing unsaturated polyester resins is available in ***REICHHOLD***'s application bulletin **"Bulk Storage and Handling of Unsaturated Polyester Resins".** For information on other ***REICHHOLD*** resin products and systems, contact your local Sales Representative or Authorized ***REICHHOLD*** Distributor.

[1] *Properties reported in this bulletin are typical of those obtained in controlled laboratory tests and will vary in production conditions.*

SAFETY

READ AND UNDERSTAND THE MATERIAL SAFETY DATA SHEET BEFORE WORKING WITH THIS PRODUCT

Obtain a copy of the Material Safety Data Sheet (MSDS) on this product prior to use. Material Safety Data Sheets are available from your local ***REICHHOLD*** Sales Representative or Authorized ***REICHHOLD*** Distributor. Such information should be requested from suppliers of all other products and components and understood prior to working with their materials.

DIRECTLY MIXING ANY ORGANIC PEROXIDE WITH A METAL SOAP, AMINE, OR OTHER POLYMERIZATION ACCELERATOR OR PROMOTER WILL RESULT IN VIOLENT DECOMPOSITION.