**Revision January 2012** 

# **DION® FR 7721-00**

# Laminating halogen free Fire Retardant Polyester Resin

#### **DESCRIPTION**

DION® FR 7721-00 is a low viscosity, medium reactivity, pre-filled, unsaturated halogen free polyester resin, with a good fire resistance.

DION® FR 7721-00 is pre-accelerated and thixotropic.

DION® FR 7721-00 contains alumina tri-hydrate and does NOT contain any halogen and antimony trioxide.

DION<sup>®</sup> FR 7721-00 contains special additives which improve the working environment during and after application due to substantially reduced styrene evaporation. The resin contains wax which gives the cured laminate a tackfree surface.

# **APPLICATION**

- Hand Lay-Up
- Spray-Up

Prolonged storage or unfavorable storing conditions may cause some separation, hence agitation of the resin before use is recommended.

In common with other pre-accelerated polyesters gel drift occurs on storage. To compensate for this more catalyst may be required.

Do not laminate this resin direct on the tool. A gel-coat must be applied before to avoid any possible adhesion.

# FEATURES BENEFITS

- Low viscosity
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- ATH filled
- Halogen free
- Low Styrene Emission
- Thixotropic
- Statistically process and quality controlled

- Improved fiberglass wetability
- Improved flow
- Laminates have a good fire behavior. Only the final product must obtain an official grade.
- Low smoke and no toxic emission in a fire situation
- Easier control of atmospheric styrene in the work
- Suitable for spray-up and hand lay-up processes
- Batch to batch consistency

The information herein is to help customers determine whether our products are suitable for their applications. Our products are intended for sale to industrial and commercial customers. We request that customers inspect and test our products before using them to satisfy themselves as to contents and suitability. 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 protection from any law or patent to be inferred. All patent rights are reserved. The exclusive remedy for all proven claims is replacement of our materials, and in no event shall we be liable for special, incidental, or consequential damages.



# **TYPICAL PROPERTIES**

#### TYPICAL LIQUID SPECIFICATIONS AT 23°C

Property	Unit	Value	Control method
Viscosity Brookfield LV, spindle 2 at 6 rpm	mPa.s (cP)	3000 – 5000	2460-001
Viscosity Cone & Plate	mPa.s (cP)	300 – 340	2470-001
Specific gravity	g/cm <sup>3</sup>	1,48 – 1,50	2100-001
Volatile content	% weight	18 – 20	2230-001
Oxygen index	%	33 mini.	2145-001
Flash Point	°C	32	ASTM D 3278-95
Gel time + 1% NORPOL® PEROXIDE 1	Minutes	18 – 22	2160-006
Storage stability from date of manufacture	Months	3	G180

#### TYPICAL MECHANICAL PROPERTIES ON CLEAR CASTING RESIN

Fully post cured

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Property	Unit	Value	Standard
Tensile strength	MPa	44	ISO 527-2001
Tensile modulus	MPa	9200	ISO 527-2001
Flexural strength	MPa	85	ISO 178-2001
Heat Distortion Temperature (HDT)	°C	93	ISO 75-1993
BARCOL hardness 934-1	-	50	-

# **STORAGE**

To ensure maximum stability and maintain optimum resin properties, resins should be stored in closed containers at temperatures below 24°C/75°F and away from heat ignition sources and sunlight. Resin should be warmed to at least 18°C/65°F prior to use in order to assure proper curing and handling. All storage areas and containers should conform to local fire and building codes. Copper or copper containing alloys should be avoided as containers. Store separate from oxidizing materials, peroxides and metal salts. Keep containers closed when not in use. Inventory levels should be kept to a reasonable minimum with first-in, first-out stock rotation.

Additional information on handling and storing unsaturated polyesters is available in Reichhold's application bulletin "Bulk Storage and Handling of Unsaturated Polyester Resins". For information on other Reichhold resins or initiators, contact your sales representative or authorized Reichhold distributor.

#### **SAFETY**

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

Obtain a copy of the material safety data sheet on this product prior to use. Material safety data sheets are available from your Reichhold sales representative. Such information should be requested from suppliers of all products 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