



# الشركة السعودية للراتجات الصناعية المحدودة Saudi Industrial Resins Limited

س.ت 4030011854 - رقم العضوية 3275 جدة - رأس المال 50.000.000 مليون ريال ( مدفوع بالكامل )  
CR 4030011854 CC 3275 Jeddah Capital SR 50 000 000 Fully Paid

## TECHNICAL DATA SHEET

### SIROPOL 992 FRA

(Flame Retardant, Corrosion Resistant, Vinylester-Based Resin)

**DESCRIPTION:** SIROPOL 992 FRA resin is a medium viscosity, unpromoted flame retardant vinylester-based resin. Laminates made with SIROPOL 992 FRA resin have achieved Flame retardancy BS476: Part 7:1997 Class I rating and Flame retardancy ASTM E-84 Class I rating as 3% antimony trioxide is added.

#### PERFORMANCE:

- Excellent Flame Retardancy, BS476: Part 7:1997 Class I rating
- Excellent corrosion resistance to acidic and alkaline environment.
- High strength characteristics
- Excellent impact strength and toughness
- Fast wet-out. Low drainage

**SUGGESTED USES;** SIROPOL 992 FRA can be used for corrosion resistant, reinforced thermosetting plastic equipment including filament wound, hand lay-up and spray-up tanks, pipes ducts, stacks, scrubbers, lining or other equipment handling corrosive gases, vapors or liquids where a high degree of flame retardancy is required.

**ALTERNATIVE PRODUCTS:** SIROPOL 992 FRA or SIROPOL 992 FR PA-SV can be used to achieve  $\leq 25$  flame spread without mixing additional antimony trioxide. Recommendations for specific services and environment can be provided.

#### TYPICAL \*LIQUID RESIN PROPERTIES (25 °C)

Percent Solids	60 ± 2 %
Viscosity - Brookfield, cps Spindle 2 @ 30 rpm	450- 500 cps
Monomer	Styrene
Pounds per Gallon	9.7
Flash Point Range °C	23 - 37



**\*Typical Values:** Based on material tested in our laboratories, but varies from sample to sample. Typical values should not be constructed as a guaranteed analysis of any specification items.

**STANDARD PACKAGE:** 205 Kgs standard steel non-returnable Drums

**DOT LABEL REQUIRED:** Flammable Liquid



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(Continued)

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**TYPICAL PERFORMANCE DATA**

(For guidance only)

**TYPICAL CURING CHARACTERISTICS:**

SPI Gel Time – 82 °C Bath, 2 % Luperco ATC paste

Temperature °C	Gel Time minutes	Peak Exothermic	Total Time minutes
82	17 min	193.0 °C	20 min

**TYPICAL MEKP CURING CHARACTERISTICS:**

Gel Time @ 25 °C Bath, (0.3% Co 6% + 0.5% DMA 10% + 1.25% M-50)

- Gel Time, Minutes 20 - 25
- Total time: 30 - 40

**CAUTION:** Thoroughly mix promoters with resin before adding catalyst.

**TYPICAL PHYSICAL PROPERTIES OF CURED CASTINGS AT (25 °C)**

TEST	VALUE	TEST METHOD
Barcol Hardness	35	ASTM D-2583
Tensile Strength, psi	12700	ASTM D-638
Tensile Modulus, psi x 10 <sup>5</sup>	3.5	ASTM D-638
Tensile Elongation at yield, %	3.4	ASTM D-638
Tensile Elongation at break, %	3.5	ASTM D-638
Flexural Strength, psi	22100	ASTM D-790
Flexural Modulus, psi x 10 <sup>5</sup>	7.4	ASTM D-790
Heat Distortion Temperature, °C	92.5	ASTM D-648

**TYPICAL FLAME RETARDANCY OF LAMINATES**

Resin	BS476:Part 7 Flame Spread	Class
<b>Siropol 992 FRA</b> With 3 % antimony trioxide	75	I



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**HANDLING:** SIROPOL 992 FRA resin contains ingredients, which could be harmful if mishandled. Contact with skin and eyes should be avoided and necessary protective equipment and clothing should be worn.

**Saudi Industrial Resins Ltd.,** maintains Material Safety Data Sheets on all of its products. Material Safety Data Sheets contain health and safety information for your development of appropriate product handling procedures to protect your employees and customers.

**OUR MSDS:** should be read and understood by all of your supervisory personnel and employees before using SIR`'s products in your facilities.

#### RECOMMENDED STORAGE:

**DRUMS:-** Store at temperatures below 25°C. Storage life decreases with increasing storage temperature. Avoid exposure to heat sources, such as direct sunlight or steam pipes. Keep containers sealed to prevent moisture pickup and monomer loss. Rotate stock.

**BULK:** - Store in stainless steel tanks or tanks lined with epoxy or phenolic coatings. Observe precautions against heat and moisture (see above). An oxygen or dry air spurge may be desirable to keep inhibitors activated. Store at temperature below 25 °C.

**COMMERICAL WARRANTY:** When stored in accordance with the above conditions, Saudi Industrial Resins warrants this product to remain within specifications for three months from the date of shipment. All things being equal, higher temperature will reduce product stability; lower storage temperature will extend product stability.

Notice: S.I.R. makes no warranty or representation as to the suitability of the product as specified herein for any particular application. The determination of the suitability of the above specification for any particular use is solely the responsibility of the user.

All precautionary labels and notices should be ready and understood by all supervisory personnel and employees before using. Consult S.I.R. and OSHA regulations for additional safety and health information. Purchaser is responsible for complying with all applicable federal, state or local laws and regulations covering use of the product. Special attention should be given to consumer applications. Freedom to use any patent owned by S.I.R. or others is not to be inferred from any statement contained herein.