



Description

SIROPOL® 8351 is a medium reactivity, orthophthalic polyester resin dissolved in styrene monomers. It has been especially formulated to provide rapid cure without the characteristic high Exotherm normally associated with resins used in filament winding applications.

SIROPOL® 8351 demonstrates good toughness, water resistance and is especially suited for filament winding application. SIROPOL® 8351 is a non-promoted and no thixotropic resin with good shelf stability at elevated temperatures. Optimum properties are attained when SIROPOL® 8351 is diluted with styrene to 175 - 225 cps.

SIROPOL® 8351 has been approved for use in constructions built under **Lloyds Register's** survey.

SIROPOL® 8351 have passed "**WRAS-certified**", meaning that they have been certified by the British Water Regulations Water Advisory Scheme to pass **BS6920** – for use with potable water

Performance

- Good toughness
- Good water resistance
- Rapid cure without characteristic high Exotherm
- Good shelf stability at high temperatures.

Suggested Uses

SIROPOL® 8351 resin is used for filament winding, hand lay-up and spray-up, Pultrution.



Viscosity and Gel-times can be adjusted to meet conditions that customers may require.

Typical* Liquid Resin Properties @25 °C

Percent Solids	58 – 61 %
Viscosity - Brookfield, cps	250 – 350 cps
Color	< 2 GH
Acid Value	08 – 20
Specific Gravity	1.04 ± .02
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 guaranteed analysis on any specification items.*



Typical Performance Data (For Guidance only)

Typical Curing Characteristics

100g resin @25 °C, (Cup method)

Cobalt 1%	Butanox M-50	Gel-time	Gel to Peak time	25 °C to Peak Exothermic	Peak Exothermic
1.0 %	1.1 %	10 – 20 min	12 – 20 min	< 40 min	170 ± 20 °C

Cobalt 6%	Butanox M-60	Gel-time	Gel to Peak times	25 °C to Peak Exothermic	Peak Exothermic
0.25 %	1.5 %	08 – 14 min	08 – 14 min	25 ± 5 min	170 ± 20 °C

Typical Physical Properties of Cured Castings @25 °C

TEST	VALUE	TEST METHOD
Barcol Hardness	> 40	ASTM D-2583
Tensile Strength, Mpa	> 70	ASTM D-638
Tensile Modulus, Mpa	> 3500	ASTM D-638
Tensile Elongation, %	> 3.0	ASTM D-638
Flexural Strength, Mpa	> 120	ASTM D-790
Flexural Modulus, Mpa	> 3600	ASTM D-790
Heat Distortion Temperature, °C	> 75	ASTM D-648
Water Absorption (24hrs), %	0.20	ISO 62-1958

* Typical Values, based on material tested in our laboratories. Typical values should not be construed as a guaranteed analysis of any specific lot, or as a specification of the product.

Based upon 3mm unreinforced castings cured with 1% of Cobalt 1% and 1% MEKP (active oxygen of 9%).

Standard Packaging 25 ton tank truck, 220 KGs Standard Steel Drums

Dot Label Required Flammable Liquid

Certificates and Approvals The manufacturing, quality control and distribution of the products, by Saudi Industrial Resins comply with;

ISO 9001:2015 and ISO 14001:2015, with WRAS certification to pass BS 6920-Water Regulations advisory Scheme, and with the applicable Lloyd's rules and regulations for classification of special service craft.



Handling

SIROPOL® 8351 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 for all of its products. Material Safety Data Sheets contain health and safety information, for development by users of appropriate product handling procedures, to protect employees and customers.

Our **MSDS** should be read and understood by all 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.

Commercial 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.



BS 6920-Water Regulations advisory Scheme



Applicable Lloyd's rules and regulations for classification of special service craft

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 read 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.