



Description

SIROPOL® 7440 resin is non-promoted medium viscosity, excellent fiber wet-out, and resilient Isophthalic polyester resin. This qualifies flame retardancy BS476: Part 7:1997 Class I rating with 100phr Aluminium Trihydrate (ATH), ideal for a wide variety of FR applications. The raw materials used in the manufacture of this resin are listed as acceptable in FDA regulation Title 21 CFR 177.2420 for repeated use in contact with food subject to user's compliance with the prescribed limitations of that regulation.

SIROPOL® 7440 resins have been approved for use in constructions built under Lloyds Register's survey.

SIROPOL® 7440 series resins 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 corrosion resistance
- High impact strength
- Excellent crack and craze resistance
- High tensile elongation
- Excellent wet out
- Flame retardancy ASTM E84-22, Class I rating with 100phr ATH

Suggested Uses

SIROPOL® 7440 resin is used for filament winding, hand lay-up and spray-up, RTM applications and formulated Isophthalic Gelcoats.

Alternative Products

SIROPOL® 7440-L resin can be modified by inclusion of thixotropy and can be promoted with Cobalt to customers required levels.



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

Typical* Liquid Resin Properties @25 °C

Percent Solids	58 – 60 %
Viscosity - Brookfield, cps	300 – 350 cps (Bulk) 400 – 500 cps (Drums)
Monomer	Styrene
Color	Clear Yellowish
Acid Value	14 – 19
Specific Gravity	1.04 ± .02

* 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	Temperature	Gel-time	Peak Exothermic	Total Time
1.0 %	1.1 %	25 °C	10 – 20 min	< 200 °C	30 – 40 min
Cobalt 6%	Butanox M-60	Temperature	Gel-time	Peak Exothermic	Total Time
0.20 %	1.0 %	25 °C	20 – 24 min	< 200 °C	30 – 40 min
Cobalt 6%	Butanox M-60	Temperature	Gel-time	Peak Exothermic	Total Time
0.25 %	1.5 %	25 °C	08 – 13 min	< 200 °C	20 – 30 min

Typical Physical Properties of Cured Castings @25 °C

TEST	VALUE	TEST METHOD
Barcol Hardness	40	ASTM D-2583
Tensile Strength, psi	10070	ASTM D-638
Tensile Modulus, psi x 10 ⁵	5.1	ASTM D-638
Tensile Elongation, %	4	ASTM D-638
Flexural Strength, psi	18230	ASTM D-790
Flexural Modulus, psi x 10 ⁵	5.1	ASTM D-790
Heat Distortion Temperature, °C	80	ASTM D-648

* 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.

Catalyzed with 1% Butanox M-60, cured at room temperature for 24 hours, post cured two hours at 280 °F.

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® 7440 resins contain 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 Lloyds 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.