



Artificial Marble Resin

Description

SIROPOL® 8420-PMM resin is a promoted, fast-cure, resilient orthophthalic acrylic modified polyester for use where high filler loading is needed. 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® 8420-PMM is acrylic modified resin and suitable for Synthetic Marble applications.

SIROPOL® 8420 base resin has been approved for use in constructions built under **Lloyds Register's** survey.

Performance

- Exhibits superior wetting properties
- Accepts high filler loadings
- Shows less tendency to crack than conventional polyesters
- Offers rapid gel and cure

Suggested Uses

SIROPOL® 8420-PMM resin is used for Synthetic Marble tops and sinks.



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

Typical* Liquid Resin Properties @25 °C

Percent Solids, %	64 – 70
Viscosity - Brookfield, cps	800 – 1200
Appearance	Clear
Acid Value	10 – 18
Specific Gravity	1.15
Flash Point Range °C	33
Gelling Time with 1% MEKP (Butanox M-50), min	15 – 25

* 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

For 100g resin, @ 25 °C (cup method)

Cobalt 6%	Butanox M50	Temperature	Gel Time	Peak Exothermic	Total Time
—	1.0 %	25 °C	15 – 25 min	< 150 °C	30 – 40 min



SPI Gel-Test

- Standard 82.2 °C Bath – 1% Benzyl Peroxide SPI Gel-time 5 min
- Total Time to Peak Exotherm, min 7.5 min
- Peak Exotherm, °C 178 °C

Typical Physical Properties of Cured Castings @25 °C

Clear castings, Base resin at 30 – 33% Styrene

Test	Results	Test Method
Barcol Hardness	45	ASTM D – 2583
Tensile Strength, psi	9000	ASTM D – 638
Elongation, %	2.1	ASTM D – 638
Flexural Strength, psi	13000	ASTM D – 790
Flexural Modulus, psi x 10 ⁶	0.6	ASTM D – 790

Glass Fiber Laminates (4 ply, 2oz mat)

Test	Results	Test Method
Glass Content, %	40	—
Barcol Hardness	50	ASTM D – 2583
Tensile Strength, psi	10000	ASTM D – 638
Flexural Strength, psi	34000	ASTM D – 790
Flexural Modulus (compressive), psi x 10 ⁶	1.35	ASTM D – 790
Strength (Edgewise), psi	23000	—
Impact Strength (Notched Izod), ft-lb/inch	22	—

** 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.*

Standard Packaging 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 the applicable Lloyd's rules and regulations for classification of special service craft.



Handling

SIROPOL® 8420-P 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 for all 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.



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 ready and understood by all supervisory personnel and employees before use. 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.