



Fire Retardant Resin

Description SIROPOL® 8050-AUV resin is halogenated flame retardant base resin with 5% antimony trioxide and promoted base resin. 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.

Performance

- Good corrosion resistance
- Excellent strength retention at elevated temperatures
- Flame retardancy BS476:Part 7:1997 Class I rating with 5% antimony trioxide
- Flame retardancy ASTM E-84 Class I rating with 5% antimony trioxide
- Resist yellowing and UV degradation

Suggested Uses


- Interior Furniture
- Building Panels
- BS476:Part 7:1997 with 5% Antimony Trioxide
- ASTM E84 with 5% Antimony Trioxide
- ASTM E 162 - 25
- ASTM D 635

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

Typical* Liquid Resin Properties @25 °C

Percent Styrene, %	30 – 40
Viscosity - Brookfield, cps spindle 3 @60 rpm	550 – 600
Color	White
Gel-time @25 °C, min	25 – 30
Specific Gravity	1.20
Cure time (De-mold time) ,Hrs	3

* *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.*

 For use in fire retardant applications, the catalyzed resin is used liberally to thoroughly wet out each ply of glass mat. Each layer should be worked well with a serrated metal roller to achieve good glass wet out and compaction. Laminates used to any service should be at least 3 mm thick and obtain at least three plies of glass mat 450gm/m² or equivalent.

Typical Curing Characteristics

100g resin @25 °C, (Cup method)

Cobalt 6%	Butanox M-50	Temperature	Gel-time
0.20 %	1.0 %	25 °C	25 – 30 min



Typical Physical Properties of Laminates

Test	Results
Glass Content by weight, %	32
Tensile Strength, psi	12400
Tensile Modulus, psi x 10 ⁵	11
Tensile Elongation , %	1.9
Flexural Strength, psi	23200
Flexural Modulus, psi x 10 ⁵	9.6
Heat Distortion Temperature,(Resin) °C	80
Heat Distortion Temperature,(Laminate) °C	200
Compressive Strength Psi	22300

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FLAME SPREAD RATING

• ASTM E 84	20
• ASTM E 162	45
• ASTM E 162 (Plus 5% Antimony Trioxide)	25
• BS476:Part 7	210
• BS476:Part 7 (Plus 5% Antimony Trioxide)	75

Laminates will withstand moderate impact and distortion without fracture. Laminates exposed to direct sunlight will tend to yellow slightly unless stabilized with UV screener; however, they will retain their high strength characteristics indefinitely, and will not be prove to stress crazing or checking. Moderate exposure to moisture and water at ambient temperatures will not affect the performance of the laminate.

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, rules and regulations for classification of special service craft.



Handling

SIROPOL® 8050-AUV 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.



ASTM E84 Class-I, rating Approval



BS476: Part 7:1997 Class-I, rating Approval

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.