



LR ISO TOOL

Isophthalic Corrosion Resin

Technical Data Sheet

LR ISO TOOL resin is part of a series of specially designed corrosion resistant resins that meet the sophisticated demands of modern technology in various corrosion applications.

LR ISO TOOL contains a maximum styrene content of 46%, meeting the Maximum Achievable Control Technology (MACT) requirements for non-atomized, spray-up, corrosion resistant resin. This resin also meets the requirements of California's SCAQMD Rule 1162 for corrosion resistant resins. LR ISO TOOL contains an odor-masking agent.

| FEATURES | BENEFITS |
|-------------------------------------|---|
| • Moderate Hardness Development | • Good cycle times with minimal exotherm |
| • Corrosion Resistant | • Works in a variety of environments |
| • Promoted Resin System | • Ready to use in customer applications |
| • Less Than 46% HAP Styrene Content | • Meets many requirements for low HAP content |
| • Contains an Odor-Masking Agent | • Minimizes odor during spray-up |
| • Good Fiberglass Wet-Out | • Works well in thick cross sections |

| RELATED PRODUCTS | GEL TIME |
|------------------|---------------|
| LR ISO TOOL | 17-23 Minutes |

| LIQUID PROPERTIES | RESULTS |
|--|-----------------------|
| Viscosity, Brookfield Model RV #2 Spindle @ 20 rpm, 77°F (25°C), cPs | 500-625 |
| Thixotropic Index | 2.0-3.0 |
| 50 grams resin @ 77°F (25°C), initiated with 1.25% DDM-9 by weight * | |
| Gel Time, min:sec | 6:00-12:00 |
| Gel to Peak Exotherm Time, min:sec | 4:00-12:00 |
| Peak Exotherm | 340-400°F (171-204°C) |
| Non-Volatile Content, % | 54.0-57.0 |
| Hazardous Air Pollutant (Styrene) Content, % | 42.0-46.0 |
| Specific Gravity | 1.07-1.10 |

| TYPICAL PROPERTIES | | | | | |
|--|---------------------------|-----------|--|-----------|--|
| Thickness | 1/8 inch (3.2 mm) Casting | | 1/8 inch (3.2 mm) Laminate | | |
| Construction | Not Applicable | | 4 Plies 1.5 oz/ft ² , 33% Glass Mat | | |
| Flexural Strength, ASTM D790 | 18,500 psi | 128 MPa | 25,000 psi | 172 MPa | |
| Flexural Modulus, ASTM D790 | 5.4 x 10 ⁵ psi | 3,724 MPa | 1.15 x 10 ⁵ psi | 7,931 MPa | |
| Tensile Strength, ASTM D638 | 9,500 psi | 66 MPa | 16,000 psi | 110 MPa | |
| Tensile Modulus, ASTM D638 | 5.5 x 10 ⁵ psi | 3,793 MPa | 1.17 x 10 ⁵ psi | 8,069 MPa | |
| Tensile Elongation, ASTM D638 | 1.7 % | 1.7 % | 2.0 % | 2.0 % | |
| Barcol Hardness, 934-1 gauge, ASTM D2583 | 45 | 45 | 45 | 45 | |
| Heat Distortion Temperature, ASTM D648 | 220 °F | 104 °C | -- °F | -- °C | |
| Compressive Strength, ASTM D695 | 26,400 psi | 182 MPa | -- psi | -- MPa | |

* Gel time and reactivity will vary due to the type and concentration of Free Radical Initiator (catalyst), shop temperature, humidity, and type of fillers used. In order to meet your individual needs consult our technical sales representative for assistance.

All specifications and properties specified above are approximate. Specifications and properties of material delivered may vary slightly from those given above. Lilly Ram Chemical Company makes no representations of fact regarding the material except those specified above. No person has any authority to bind Lilly Ram Chemical Company to any representation except those specified above. Final determination of the suitability of the material for the use contemplated is the sole responsibility of the Buyer. Our technical sales representatives will assist in developing procedures to fit individual requirements, but all advice is accepted at your risk and should be checked for suitability to your particular processes. These test data and properties are based on results obtained for a specific material under the specified test conditions. They are not to be used as specifications and are not warranted as performance attributes for any product or system. Specifications and properties of standard production material may vary slightly from those in this report. Lilly Ram Chemical Company makes no warranties regarding any material and/or samples described in this report unless that representation is provided to your company in writing by a Technical Director of Lilly Ram Chemical Company or one of his or her managers.

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