



## SUPER HYSLIK 200

Super Hyslik 200 includes a proprietary internal lubricating system to aid windability and insertion.

Rea Material Code: **TAIH**

Rea Insulation Code: **20**

Insulation Material Description: **Theic Modified Polyester overcoated with Polyamide-imide (AI)**

Thermal Class: **200**

Shape: **Round**

Conductor: **Copper**

NEMA Specification: **MW 35-C, MW 73-C**

IEC Specification: **60317-13**

UL Number: **E37683**

### MARKETS

Motors/Generators:

- General
- Comm & Ind
- Generator
- HVAC
- Residential

Transformers:

- Specialty Transformers

Automotive:

- General

### TYPICAL APPLICATIONS

Dry-type transformers, hermetic motors, tool motors, automotive alternator stators, solenoids, high-voltage transformers, and torodial transformers

### FEATURES AND BENEFITS

- Tough abrasion-resistant surface which withstands automated winding operations.
- Excellent dielectric performance.
- Superior chemical and moisture resistance, especially with refrigerants in hermetic applications.
- Superior thermal overload protection, especially during locked-rotor conditions.
- Superior performance in hermetics.

### Basecoat

High thermal endurance High temperature dielectric Resists thermoplastic flow Excellent adhesion and flexibility

### Topcoat

Heat shock resistant Moisture resistant Surface toughness Chemical resistant

### TYPICAL PROPERTIES

This data is typical of 18 AWG copper, heavy build insulation only. It is not intended to be used to create specification limits.

### THERMAL

| Thermal Endurance         |         |                                  |
|---------------------------|---------|----------------------------------|
|                           |         | >210°C                           |
| Thermoplastic Flow        | minimum | typical                          |
|                           | 300°C   | 350°C                            |
| Heat Shock (20% 3X)       |         |                                  |
|                           |         | 20% 3x @ 220°C<br>20% 3x @ 240°C |
| Stress Relief Temperature |         |                                  |
|                           |         | 160°C                            |

### MECHANICAL

| Mandrel Flexibility | minimum    | typical     |
|---------------------|------------|-------------|
| After Elongation    | 20% 3x OK  | 30% 1x OK   |
| After Snap          | 3x OK      | 1x OK       |
| Unilateral Scrape   | minimum    | typical     |
| Avg. of 3 sides     | 1150 gms   | 1700 gms    |
| Repeated Scrape     | minimum    | typical     |
| 700 gms             | 60 strokes | 100 strokes |
| Dynamic C of F      | minimum    | typical     |
|                     |            | 0.0 4 6     |

### ELECTRICAL

| Dielectric Breakdown    |                     |
|-------------------------|---------------------|
| @RT                     | 11 kV               |
| @ 200° C                | 7 kV                |
| High Voltage Continuity |                     |
| NEMA @ 1500 V DC        | 5 faults/100 ft max |
| Typical @ 2000 DC       | 0-1 faults/100 ft   |

### CHEMICAL

| Resistance to Solvents  |   |
|-------------------------|---|
| After 24 hrs @ RT       | Xylene<br>50/50 Cellosolve/Xylene<br>Perchloroethylene<br>1% NaOH<br>28% Sulfuric Acid<br>Gasohol |
| Retained Dielectric     |   |
| 72 hrs Exposure + 300°C |   |

**AVAILABILITY**

|        |             |
|--------|-------------|
| Single |             |
|        | 10.5-38 AWG |
| Heavy  |             |
|        | 10.5-38 AWG |

Conditioning

3.5 kV