



## PYRE-ML

Rea Material Code: **ML**  
 Rea Insulation Code: **11**  
 Insulation Material  
 Description: **Aromatic Polyimide**  
 Thermal Class: **240**  
 Shape: **Round**  
 Conductor: **Copper**  
 NEMA Specification: **MW 16-C**  
 IEC Specification: **60317-46**  
 UL Number: **E37683**

### MARKETS

Motors/Generators:  
 General  
 Comm & Ind  
 Traction

Transformers:  
 Specialty Transformers

### TYPICAL APPLICATIONS

Dry-type transformers, traction motors, DC field coils, submersible pump motors very high temperature coils and relays, encapsulated coils, and hermetically sealed relays

### FEATURES AND BENEFITS

- Extraordinary thermal and chemical stability
- Highest overload resistance, cut thru resistance and operating temperature classification of any Rea film insulation
- Exhibits high resistance to radiation
- Minimum outgassing makes ML ideal for use in hermetically sealed coils and relays
- Chemically compatible with the widest range of solvents, varnishes and encapsulating materials

### AVAILABILITY

Single	14-22 AWG
Heavy	1-22 AWG

### 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		
		>240°C
Thermoplastic Flow	minimum	typical
	450°C	500+°C
Heat Shock (20% 3X)		
		20% 3x @ 280°C
Stress Relief Temperature		
		200°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	1500 gms

### ELECTRICAL

Dielectric Breakdown		
@RT		12 kV
@ 220° 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
		50/50 Cellosolve/Xylene
		Perchloroethylene
		1% NaOH
		28% Sulfuric Acid
		Freon TMS