



NYSOL

Solderable without prior insulation removal. Polyamide (Nylon*) overcoat provides excellent mechanical protection during winding and insertion.

Rea Material Code: **NS**
 Rea Insulation Code: **16**
 Insulation Material Description:
Polyurethane overcoated with Polyamide (Nylon)
 Thermal Class: **155**
 Shape: **Round**
 Conductor: **Copper**
 NEMA Specification: **MW 80-C**
 IEC Specification: **60317-21**
 UL Number: **E37683**

MARKETS

Motors/Generators:
General
Residential
 Transformers:
Specialty Transformers

TYPICAL APPLICATIONS

Coils (particularly random wound), universal motors, relays, lighting ballast transformers, fractional HP motors, torroidalcoils, and ignition coils

FEATURES AND BENEFITS

- Excellent dereeling and windability on high speed and/or automated winding machines.
- Produces compact coils and windings.
- Self-fluxing providing excellent soldered connections with solder temperatures as low as 360°C.
- Exceptional film flexibility and adhesion resisting winding damage.
- Extremely resistant to a variety of solvents including most varnishes and hardener catalysts.

AVAILABILITY

Single

7-32 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		
		>160°C
Thermoplastic Flow	minimum	typical
	200°C	255°C
Heat Shock (20% 3X)		
	20% 3x @ 175°C	
Stress Relief Temperature		
	130°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		10 kV
@ 155° C		6 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

