COMPOUND DATA SHEET

IC567A

STRIPPABLE SEMI-CONDUCTIVE COMPOUND FOR INSULATION SHIELD FOR MEDIUM VOLTAGE POWER CABLE

IC567A is a pelletized, crosslinkable semi-conductive compound developed for triple extrusion processes as a strippable insulation shield for medium voltage power cables. It strips cleanly over a wide temperature range (-20°C to +50°C), and minimizes residual insulation shield being left on the insulation surface (pick off) after stripping.

IC567A was designed for use with EPR, XLPE and TRXLPE homopolymer insulation materials.

IC567A was developed for use in cables manufactured to the following specifications:

AEIC CS8-2000

ICEA S-94-649

ICEA/ANSI S-93-639

ICEA/ANSI S-97-682

CAN/CSA-C68.3-97

Typical Physical Properties on Plaque

Property	Typical Value	Units	Test Method
Specific Gravity, 23°C	1.14		ASTM D 792
Tensile Strength	1750 (12.1)	psi (MPa)	ASTM D 412
Elongation	250	%	
Secant Modulus	5500 (38)	psi (MPa)	
Air Oven Aged, 7 days at 121°C			ASTM D 638
Retained Tensile Strength	95	% of Orig.	
Retained Elongation	95	% of Orig.	
Air Oven Aged, 7 days at 136°C			
Retained Tensile Strength	90	% of Orig.	
Retained Elongation	90	% of Orig.	
Hot Creep, 150°C			
Elongation	45	%	ICEA T-28-562
Set	5	%	
Low Temperature Brittleness Point, F_{50}	-50	°C	ASTM D 746
Durometer Hardness	85	Shore A	ASTM D 2240
Heat Deformation, 1 hour at 121°C, 2000g	2	%	ICEA T-27-581

Typical Electrical Properties on Plaque

Property	Typical Value	Units	Test Method
DC Volume Resistivity			
23°C	50	Ω-cm	ASTM D 991
90°C	100	Ω-cm	
110°C	75	Ω-cm	

Typical Physical Properties on Cable*

Property	Typical Value	Units	Test Method
Tensile Strength	1600 (11)	psi (MPa)	ASTM D 638
Elongation	250	%	
Adhesion, to XLPE or EPR insulation			ICEA S-66-524
-20°C	22	lb / ½" (5.6 N/mm)	
25°C	16	lb / ½" (4.6 N/mm)	
50°C	9	lb / ½" (3.2 N/mm)	

Typical Electrical Properties on Cable*

Property	Typical Value	Units	Test Method
DC Volume Resistivity			ICEA S-66-524
23°C	10	Ω-m	
90°C	20	Ω-m	
110°C	10	Ω-m	

*Cable tested: 1/0 AWG-19 AL, 15 kV XLPE, 100% insulation level, dry cure.

Process Parameters

The following process parameters are offered as a starting point, however adjustments may be needed to optimize **IC567A** depending upon equipment and cable design. A minimum 15:1 L/D extruder is recommended. Indianapolis Compounds can provide assistance in designing an extruder screw to optimize processability of **IC567A.**

Extruder	Temperature	Profile
Zone 1	145°F	63°C
Zones 2 & 3	185°F	85°C
Zone 4	205°F	96°C
Die & Head	210°F	99°C
Screw Cooling	110°F	43°C
Screen Pack	14 Mesh	

Packaging

BULK BOX Heavy-duty gaylord box

LINER Polyethylene, 4 mils (0.1 mm)

NOTE Compound can be supplied in intermediate bulk containers (IBC bags).

Handling/ Storage

Product should be stored below 100°F (38°C) to avoid blocking. The use of box covers while unloading, and a pneumatic unload system equipped with pre-filters is recommended to maintain product cleanliness. Boxes can be stacked three high for storage. Bulk handling or storage is not recommended.

Environmental

HANDLING Under normal conditions of use there are no known hazards associated with handling **IC567A.** The pelletized form of this product minimizes exposure to dust or mists.

DISPOSAL Deposit in waste containers and landfill in accordance with all applicable governmental laws and regulations.

For further information contact:

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