



Dow Electrical & Telecommunications

System Solutions for Underground Distribution Electrical Infrastructure

Depend on one source for polymeric components

From tried and true cable compounds that have withstood the test of time, to ongoing developmental activity for new cable and accessory applications, Dow Electrical & Telecommunications, a business operating unit of The Dow Chemical Company (“Dow E&T”) is directly involved in nearly all phases of medium-voltage underground systems. Known primarily as the inventor of water-tree-retardant crosslinked polyethylene (TR-XLPE) insulation, introduced to the market in 1983, Dow E&T also provides fully-formulated compounds for semi-conductive shields and jacketing materials. In addition, Dow E&T now provides elastomeric resins for ethylene alkene copolymer (EAM) and ethylene propylene rubber (EPR) cable constructions and accessories including separable connectors, splices and terminations.

Choices to cover your insulation needs

In addition to world-class shield and jacketing materials, Dow E&T has the industry’s broadest portfolio of insulation materials. This enables us to offer our customers choices to construct or specify cables that best meet the needs of the underground system in which they are operated. The portfolio is comprised of DOW ENDURANCE™ TR-XLPE insulation, ENGAGE™ elastomers for EAM insulation and NORDEL™ EPDM for EPR insulation.



High performance TR-XLPE insulation
Next-generation performance in TR-XLPE insulation is realized through DOW ENDURANCE™ HFDC-4202 EC. This insulation meets or exceeds all global requirements including ICEA, AEIC, CSA, NMX and VDE/CENELEC¹. The product also was recognized by *R&D Magazine* as a 2015 R&D 100 winner for its patented technology enabling improved performance through extended cable life and enhanced reliability, while reducing total life-cycle cost².

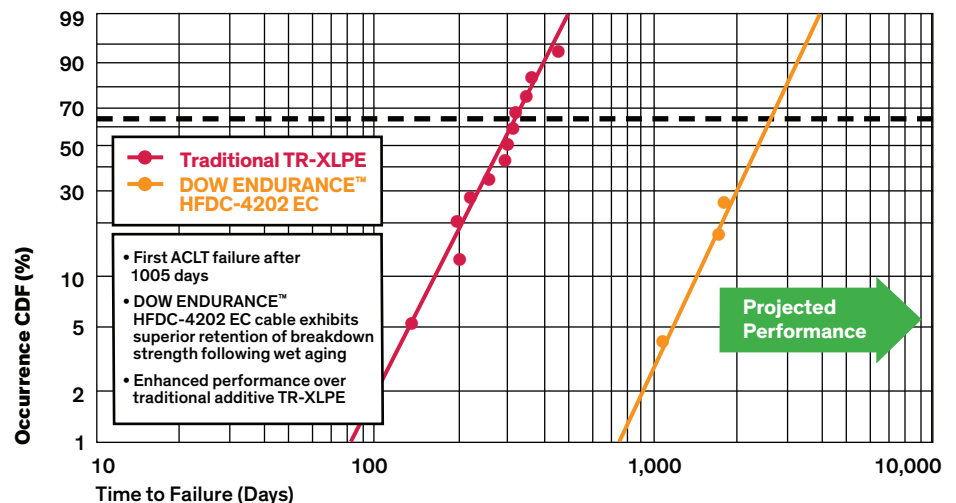


Global Manufacturing Capability

TEXAS AND GULF COAST, USA
CENTRAL GERMANY

- Fully-integrated production facilities from ethylene to final product
- Continuous sampling for cleanliness and smoothness targets
- State-of-the-art manufacturing, quality, packaging and logistics practices to ensure delivery of the materials you need, when and where you need them

Enhanced Performance of DOW ENDURANCE™ HFDC-4202 EC TR-XLPE Insulation

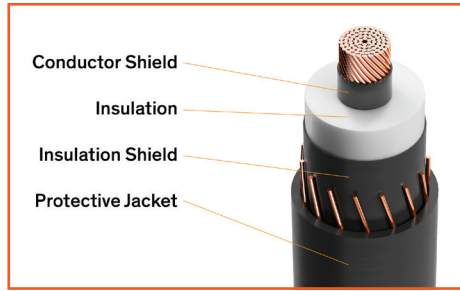


4,4 ACLT of 15kV MV cable with 4.45 mm insulation

¹Regulations may vary by city, state, country, or geographic region. Please contact the Dow Customer Service Group in your region for any additional, relevant regulatory information.

²Sutton, S. (2011). A LIFE CYCLE ANALYSIS STUDY OF COMPETING MV CABLE MATERIALS. 21st International Conference on Electricity Distribution (p. 4). Frankfurt: CIRED.

**DOW ENDURANCE™ Solutions
for Distribution Power Cables**



Trust an industry leader

Working together with our customers, Dow E&T has consistently demonstrated that using an engineered system of materials results in superior performance and reliability and can result in a lower total cost over the life of the system. We recommend pairing Dow insulation with Dow semi-conductive shield and jacketing

materials to obtain the optimal result. For materials science-based system solutions for reliable, long-life power cables, trust an industry leader as a consistent and reliable source – trust Dow E&T.

Insulation		Region	Africa, Middle East & India	Asia Pacific	Europe	Latin America	North America
Material	Applications						
DOW ENDURANCE™ HFDC-4202 EC	Enhanced long-life, water-tree-retardant, crosslinkable, polyethylene insulation compound		•	•	•	•	•
DOW™ HFDB-4201 EC	Extra-clean, unfilled, crosslinkable, polyethylene insulation compound		•	•	•	•	•
DOW™ HFDC-4201 NT	Extra-clean, unfilled, crosslinkable, polyethylene insulation compound		•	•	•		
DOW™ HFDB-4202 NT	Water-tree-retardant, crosslinkable, polyethylene insulation compound		•	•		•	
DOW™ HFDC-9253	Low-sag, extra-clean, unfilled, crosslinkable, polyethylene insulation compound		•	•	•	•	•
DOW™ HFDA-9210 BK	Crack-resistant, black crosslinkable polyethylene insulation compound			•			
DOW™ HFDA-9217 BK	Crack-resistant, black crosslinkable polyethylene insulation compound			•		•	
SI-LINK™ DFDA-6451 NT	Crosslinkable polyethylene for moisture-curable power cable insulation			•		•	

Elastomers		Region	Africa, Middle East & India	Asia Pacific	Europe	Latin America	North America
Material	Applications						
ENGAGE™ 7447 EL	Polyolefin elastomer for EAM power insulation and semi-conductive compound		•		•	•	•
ENGAGE™ 8452 EL	Polyolefin elastomer for EAM power insulation and semi-conductive compound			•	•	•	•
NORDEL™ IP 3722P EL	Hydrocarbon rubber for EPR power insulation and semi-conductive compound		•	•	•	•	•

Semi-conductive Compounds

Material	Applications	Region	Africa, Middle East & India	Asia Pacific	Europe	Latin America	North America
DOW ENDURANCE™ HFDA-0580 BK	Conventional, crosslinkable semi-conductive shielding compound for use on aluminum conductors					•	•
DOW ENDURANCE™ HFDA-0581 BK	Conventional, crosslinkable semi-conductive shielding compound compatible with aluminum and copper conductors					•	•
DOW ENDURANCE™ HFDB-0586 BK	Conventional, crosslinkable semi-conductive shielding compound compatible with aluminum and copper conductors			•			
DOW ENDURANCE™ HFDA-0587 BK	Conventional, crosslinkable semi-conductive shielding compound compatible with copper and aluminum conductors		•	•	•	•	•
DOW ENDURANCE™ HFDK-0587 BK	Conventional, crosslinkable semi-conductive shielding compound compatible with copper and aluminum conductors		•	•	•	•	
DOW ENDURANCE™ HFDA-0800 BK EC	Super-smooth, extra-clean, crosslinkable semi-conductive shielding compound compatible with aluminum and copper conductors					•	•
DOW ENDURANCE™ HFDA-0802 BK EC	Super-smooth, extra-clean, crosslinkable semi-conductive shielding compound for use on aluminum conductors					•	•
DOW ENDURANCE™ HFDA-0693 BK	Strippable, crosslinkable semi-conductive insulation shielding compound for use over crosslinked insulation		•	•	•	•	•

Jackets

Material	Applications	Region	Africa, Middle East & India	Asia Pacific	Europe	Latin America	North America
DOW AXELERON™ GP-6059 BK CPD	Black LLDPE compound for power cable jacketing		•		•	•	•
DOW ENDURANCE™ DFDA-1375 RD	Red LLDPE compound for identification of power cables					•	•
DOW ENDURANCE™ DHDA-7708 BK	Black, semi-conducting LLDPE jacket compound		•	•	•	•	•
DOW™ DFDA-7530 NT	Colorable LLDPE compound for cable jacketing		•	•	•	•	•
DOW™ DFDK-6050 NT	Colorable LLDPE compound for cable jacketing				•		
DOW™ DGDA-1310 BK	Black HDPE compound for power cable jacketing		•	•	•	•	•
DOW™ DGDA-1310 NT	Colorable HDPE compound for power cable jacketing		•		•	•	•
DOW™ DGDK-6862 NT	Colorable HDPE compound for power cable jacketing				•		
DOW™ DGDL-3479 BK	Black HDPE compound for power cable jacketing			•		•	
DOW™ DGDL-3479 NT	Colorable HDPE compound for power cable jacketing			•		•	

ABOUT DOW ELECTRICAL & TELECOMMUNICATIONS

Dow E&T, a business unit of The Dow Chemical Company ("Dow"), is a leading global provider of products, technology, solutions and knowledge that sets standards for reliability, longevity, efficiency, ease of installation and protection that the power and telecommunications industries can count on in the transmission, distribution and consumption of power, voice and data. Understanding that collaboration is essential to success, Dow E&T works together with cable makers, other industry suppliers, utilities, municipalities, testing institutes and other organizations around the world to help develop solutions and create mutual value that will sustain these industries for years to come. For more information, visit www.dow.com/electrical.

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