HELP KEEP THE POWER ON LONGER, STRONGER

ENDURANCE™ HFDC-4202 INSULATION COMPOUND: TR-XLPE TECHNOLOGY ENABLING CABLE SYSTEMS WITH LOWER TOTAL LIFE CYCLE COST

ACLT ANALYSIS OF COMPETITIVE MATERIALS\(^{(1)}\)

SINCE 1983, DOW HAS SUPPLIED ENOUGH TR-XLPE COMPOUND TO PRODUCE A DISTRIBUTION CABLE EXTENDING TO THE MOON AND BACK FIVE TIMES.

ENDURANCE™ HFDC-4202 EC EXHIBITS OUTSTANDING WET AGING.

\(\text{\textgreater} 7.5\) years

\(\text{\textgreater} 6.1\) years

ADVANCING TREE-RETARDANT TECHNOLOGY FOR MORE THAN THREE DECADES

1983 FIRST COMMERCIAL TR-XLPE
Dow introduces tree-retardant crosslinked polyethylene (TR-XLPE) technology\(^{(3)}\) with demonstrated long life performance

2X LONGER LIFE

1998 ENDURANCE™ HFDB-4202
The excellent electrical performance of first generation plus more robust cable manufacturing

IMPROVED PROCESSING

2012 ENDURANCE™ HFDC-4202
Enabling next-generation cable systems with significantly longer performance life than competitive materials\(^{(4)}\)

5X LONGER LIFE

\(\text{(1) Data per tests conducted at the Marshall Technology Center under contract to Dow. Additional information available upon request. Properties shown are typical, not to be construed as specifications. Users should confirm results by their own tests.}\)
\(\text{(2) 63.2\% failure.}\)
\(\text{(3) This technology was acquired with Union Carbide Corporation (UCC).}\)
\(\text{(4) Based on Accelerated Cable Life Test (ACLT) under 4,4 conditions.}\)
\(\text{(5) For more information, visit https://www.rd100conference.com/awards-winners-finalists/5430/underground-power-distribution-upgrade/}\)
\(\text{®™Trademark of The Dow Chemical Company (“Dow”), or an affiliated company of Dow}\)
Since 1983, Dow’s proprietary water-tree-retardant technology for crosslinked polyethylene (TR-XLPE) has powered continuous improvement through three generations of high quality cable insulation solutions.

INNOVATIVE PROGRESS
Cable makers and utilities asked for an even better cable compound—and Dow responded. ENDURANCE™ HFDC-4202 Insulation Compound is tested for voltages from 5-46 kV and enables lower total life cycle cost through:

- Longer life than other TR-XLPE products
- Improved electrical performance in wet underground environments
- Reduced strip force (when used with Dow insulation shields) for easier, cleaner cable termination and splicing
- Improved manufacturing robustness
  - Superior scorch retardance for improved cable quality
  - Optimized cure performance/consistent processing
  - Compatibility with existing extrusion equipment

CAPABILITIES AND COMMITMENT
All TR-XLPE is not created equal.
ENDURANCE™ compounds for cable systems offer cable makers and utilities exceptional mechanical strength, electrical properties and aging stability. By working side-by-side with customers, we’re able to align Dow technology and experience with individual application needs. Intensive testing and validation helps ensure that every material Dow formulates meets the specific processing and performance requirements of current and next-generation wire and cable products. This passionate focus on quality not only exemplifies Dow’s commitment to producing high class solutions—but also drives our pursuit of innovative ideas.

Contact your Dow representative or visit www.dowendurance.com for more information.

GLOBAL TESTING
Cables insulated with ENDURANCE™ HFDC-4202 meet or exceed qualification requirements in a vast number of regions, including:

- Association of Edison Illuminating Companies (AEIC)
- Insulated Cable Engineers Association (ICEA)
- Underwriters Laboratories (UL)
- Canadian Standards Association (CSA)
- Normas Mexicanas (NMX)
- Russian GOST R 55025
- CENELEC Harmonized Document
- German VDE 0276-620:2010-11

This document is intended for global use.
Published September, 2018.

(1) Dow recommends a systems approach to cable construction to ensure the highest possible performance throughout the life of the cable. Dow insulation and semi-conductive compounds (shields and jackets) have been designed to work exceptionally well together.
(2) Based on ACLT under 4,4 conditions.
(3) Based on ACLT under 4,4 conditions.
(4) Data per tests conducted by multiple organizations. Additional information available upon request. Properties shown are typical, not to be construed as specifications. Users should confirm results by their own tests.

NOTICE: No freedom from infringement of any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer’s use and for ensuring that Customer’s workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all countries. Dow assumes no obligation or liability for the information in this document. References to “Dow” or the “Company” mean the Dow legal entity selling the products to Customer unless otherwise expressly noted. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.