

가교 폴리에틸렌의 수트리 특성

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Water Tree Characteristics of Crosslinked Polyethylene

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Abstract : Water tree experiments were done for several types of cross-linked polyethylenes. Test method is followed by ASTM D6097. Polyethylene is divided for four subgroup. First One is chemically cross-linked general XLPE, and second one is chemically cross-linked tree-retardant XLPE, and the third one is silane cross-linked polyethylene made by monosil process, and the last one is silane cross-linked polyethylene made by copolymer. Tree retardant XLPE shows the shortest water tree length. Chemically cross-linked general XLPE shows the longest water tree length. Silane cross-linked polyethylene by copolymer is similar to tree retardant XLPE and similar breakdown strength. So silane cross-linked XLPE by copolymer could be used for the the medium voltage cable which should have tree retardant characteristics.

Key Words : Cross-linked Polyethylene, Water Tree, Medium voltage insulation