

Hanwha Solutions

Wire & Cable Compounds





Wire & Cable Compounds

Products founded on specialized research, engineering and marketing expertise

Since its establishment of Wire & Cable business in 1981, Hanwha Solutions has embarked on a transformative journey, driven by a vision to pioneer an eco-friendly future. At the heart of its operations lies a commitment to sustainability, powered by renewable energy sources including solar, wind, and hydrogen. This dedication has positioned Hanwha Solutions as a leader in the development of an eco-friendly value chain, emphasizing the importance of a sustainable tomorrow through every stride and innovation.

Hanwha Solutions has marked its journey with significant achievements, setting industry benchmarks and fostering innovation. In 1991, the company introduced the first domestic 132kV XLPE cable, a testament to its pioneering spirit. The year 2009 witnessed another remarkable milestone as Hanwha Solutions successfully passed the 345kV XLPE PQ Test, further cementing its reputation for excellence. By 2022, the company achieved a groundbreaking feat with the first domestic production of HV-grade semiconductive material, EBA(Ethylene Butyl Acrylate), underscoring its commitment to innovation and technological advancement.







Power Cable Compounds

| Class | Property | Melt Index | Density | Tensile Strength at Break | Elongation at Break | Application |
|-----------------------------------------|---------------|---------------|---------|---------------------------------|------------------------|--------------------------------------------------------------------------------------------------------------------|
| | Grade | g/10min | g/cm³ | kg/cm² | % | |
| LV Power Cable Insulation | CLNA-8262 | 2.60 | 0.922 | 180 | 800 | LLDPE, Base Resin for Silane Crosslinking |
| | CLNB-8141S | - | 0.921 | 200 | 550 | XLPE for MV Cable Insulation (Up to 69kV(Um 72.5kV)) |
| | CLNA-TR8142EC | - | 0.922 | 200 | 550 | Tree Retardant XLPE for URD or Submarine Cable(Up to 69kV(Um72.5kV)) |
| MV/HV/EHV/DC Power Cable | CLNA-8141SC | - | 0.921 | 200 | 550 | XLPE for HV Cable Insulation (Up to 161kV(Um 170kV)) |
| Insulation | CLNA-8141EHV | - | 0.921 | 200 | 550 | XLPE for EHV Cable Insulation (Up to 230kV(Um 245kV)) |
| | CLNA-8141SEHV | - | 0.921 | 200 | 550 | XLPE for EHV Cable Insulation (Above 230kV(Um 245kV)) |
| | CLNA-8151 | - | 0.921 | 200 | 550 | XLPE for DC Power Cable Insulation (up to 525kV) |
| HV/EHV Subsea Cable Insulation | CLNS-8141SC | - | 0.921 | 200 | 550 | XLPE for HV Cable Insulation (Up to 161kV(Um 170kV)), Enhanced Long-run Processability, Shorter Degassing time |
| | CLNS-8141EHV | - | 0.921 | 200 | 550 | XLPE for EHV Cable Insulation (Up to 230kV(Um 245kV)), Enhanced Long-run Processability, Shorter Degassing time |
| | CLNS-8141SEHV | - | 0.921 | 200 | 550 | XLPE for EHV Cable Insulation (Above 230kV(Um 245kV)), Enhanced Long-run Processability, Shorter Degassing time |
| | CLBA-8923BK | - | 0.932 | 200 | 550 | Black XLPE for Outdoor Cable Insulation (Up to 36kV), Excellent Tracking Resistance |
| Outdoor Cable Insulation | CLBB-8923BK | - | 0.923 | 200 | 550 | Black XLPE for Outdoor Cable Insulation (Up to 36kV) |
| | CLBA-8924BK | - | 0.930 | 200 | 550 | Black XLPE for Outdoor Cable Insulation (Up to 36kV), Excellent Weatherability |
| | CTBA-8720BK | - | 1.14 | 190 | 200 | Conductor and Bonded Insulation Shield for MV Cable (Up to 69kV(Um 72.5kV)) |
| Semiconductive Power Cable Shield | CTBA-8730BK | - | 1.14 | 190 | 200 | Conductor and Bonded Insulation Shield for MV Cable (Up to 69kV(Um 72.5kV)) |
| | CCBA-8725BK | - | 1.17 | 140 | 300 | Strippable Insulation Shied for MV Cable (Up to 69kV(Um 72.5kV)) |
| | CCBA-8735BK | - | 1.17 | 140 | 300 | Strippable Insulation Shied for MV Cable (Up to 69kV(Um 72.5kV)) |
| | CTBA-8740BK | - | 1.14 | 150 | 190 | Conductor and Insulation Shield for HV Cable (Up to 161kV(Um 170kV)) |
| | CTBA-8745BK | - | 1.14 | 150 | 190 | Conductor and Insulation Shield for EHV Cable (Up to 230kV(Um 245kV)) |
| | CTBA-8750BK | - | 1.14 | 150 | 190 | Conductor and Insuation Shield for EHV Cable (Above 230kV(Um 245kV)) |
| | CTBA-8760BK | - | 1.14 | 150 | 190 | Conductor and Insuation Shield for DC Cable (Up to 500kV) |

With a network spanning 265 companies across 58 countries, Hanwha Solutions Wire & Cable has established itself as a formidable player in the global cable compound market. The company aspires to become an XLPE Specialty Player, focusing on the Physical and Chemical Cleanliness of extra-high voltage transmission cables. This ambition is aimed at producing high-purity, high-quality cables capable of ensuring a stable power supply under extreme conditions.

Hanwha Solutions has broadened its product portfolio through the acquisition of core technologies, encompassing materials for 90° C HVDC cables, submarine cables, and other strategic product lines. The company's proprietary process technology configures the entire production process as a Closed System, maximizing cable performance and ensuring the stable production of high-purity products. This meticulous attention to detail and quality reflects Hanwha Solutions' dedication to innovation and customer trust.

Hanwha Solutions is committed to reinforcing its market leadership through a diverse product portfolio and cutting-edge technology. As Hanwha Solutions continues its journey towards a sustainable and electrified future, it remains dedicated to pioneering green energy solutions, reinforcing its position as a global leader in wire and cable compounds, and lighting the way for a brighter, more sustainable tomorrow.

Telecommunication Cable Compounds

| Property | Melt Index | Density | Tensile Strength at Break | Elongation at Break | Application | |
|------------|---------------|-------------|------------------------------|---------------------|---------------------------------------------------------|--|
| Grade | g/10min | g/cm³ | kg/cm² | % | | |
| CHNA-8380 | 0.7 | 0.945 | 240 | 550 | HDPE Insulation for Solid, Skin of Foam/Skin, LAN Cable | |
| CHNA-8380L | 0.7 | 0.945 | 240 | 550 | HDPE Insulation for High Speed LAN Cable | |
| 8600H/L | 8.5/2.0 | 0.962/0.921 | 260/120 | 500/600 | HDPE/LDPE Insulation for Gas Injection Coaxial Cable | |

⁽¹⁾ The data is typical value, not the specification and may be varied depending on the test condition.

Jacketing Compounds

| Property | Melt Index | Density | Tensile Strength at Break | Elongation at Break | Carbon Black Contents | Application |
|-------------|---------------|---------|---------------------------------|------------------------|-----------------------------|-------------------------------------------------------------------|
| Grade | g/10min | g/cm³ | kg/cm² | % | % | |
| CLBB-850BK | 0.25 | 0.933 | 165 | 550 | 2.6 | Black LDPE Jacketing Compound |
| CLNA-8400 | 0.70 | 0.920 | 180 | 800 | - | Natural Colorable LLDPE Jacket, UV stabilizer needs to be blended |
| CLBA-8450BK | 0.80 | 0.934 | 200 | 800 | 2.5 | Black LLDPE Jacketing Compound |
| CMBA-8240BK | 0.23 | 0.949 | 300 | 800 | 2.5 | Black MDPE Jacketing Compound |
| CHBA-8241BK | 0.23 | 0.955 | 300 | 800 | 2.5 | Black HDPE Jacketing Compound |

⁽¹⁾ The data is typical value, not the specification and may be varied depending on the test condition.

EVA for Wire & Cable Compounds

| Property | VA Content | Melt Index | Density | Melting Temp | Tensile Strength at Break | Elongation at Break | Hardness (Shore A) | Application |
|----------|---------------|---------------|---------|-----------------|---------------------------------|------------------------|-----------------------|-----------------------------------------------|
| Grade | % | g/10min | g/cm³ | ℃ | kg/cm² | % | - | |
| 1815 | 15 | 6.0 | 0.936 | 88 | 160 | 800 | 93 | Base Resin for Inner Semiconductive Compounds |
| 2815 | 15 | 6.5 | 0.936 | 88 | 170 | 800 | 93 | Base Resin for Inner Semiconductive Compounds |
| 1825 | 25 | 2.0 | 0.947 | 77 | 180 | 850 | 84 | Base Resin for Flame Retardant Compounds |
| 1828 | 28 | 4.0 | 0.950 | 75 | 200 | 800 | 79 | Base Resin for Flame Retardant Compounds |
| 1834 | 33 | 17.0 | 0.953 | 63 | 105 | 800 | 65 | Base Resin for Outer Semiconductive Compounds |

⁽¹⁾ The data is typical value, not the specification and may be varied depending on the test condition.

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Leading EHV, Submarine and HVDC Compound Supplier

Hanwha Solutions builds a better tomorow with clean technology



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Hanwha Solutions stands as a beacon of innovation and sustainability in the global market, driven by a commitment to excellence and a vision for a better future. Established as a subsidiary of the renowned Hanwha Group, Hanwha Solutions has emerged as a leader in various sectors, ranging from renewable energy to advanced materials, contributing significantly to the development of industries worldwide.

Hanwha Solutions traces its roots back to the establishment of Hanwha Chemical Corporation in 1965, marking a significant miles tone in Korea's chemical industry advancement. From pioneering Korea's first production of PVC (Polyvinyl Chloride) in 1965 to achieving successive milestones such as Korea's inaugural production of LDPE (Low Density Polyethylene) in 1972, Wire & Cable compounds (XLPE) in 1981, and LLDPE (Linear Low-Density Polyethylene) in 1986, the company has remained at the forefront of innovation. Furthermore, Hanwha Chemical expanded its portfolio over the decades to include a comprehensive range of basic petrochemical products, including HDPE (High Density Polyethylene), EVA (Ethylene Vinyl Acetate Copolymer), CA (Chlor-Alkali), ASR (Alkali Water Soluble Resin), and TDI (Toluene Diisocyanate). In 2018, Hanwha Chemical Corporation merged with Qcells(Solar Energy), Insight(Real Estate Development) and Q Energy(Green Energy), rebranded itself as Hanwha Solutions, reflecting its evolving focus on delivering sustainable solutions for the plant through smart energy solutions and customer-focused materials.

Continuing its trajectory of growth and diversification, Hanwha Solutions Chemical Division expanded its operations to encompass the production of CPVC (Chlorinated Polyvinyl Chloride), hydrogenated resins, XDI (Xylylene diisocyanate), and advanced Wire & Cable compounds (Extra-high voltage XLPE & Semicon for DC(Direct Current), AC(Alternating Current) and Submarine Cable). Through strategic expansions and investments in research and development, Hanwha Solutions Chemical Division has consistently adapted to meet the evolving needs of industries worldwide, solidifying its position as a leader in the global chemical market.

Hanwha Solutions

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