

**SolutionPartner**

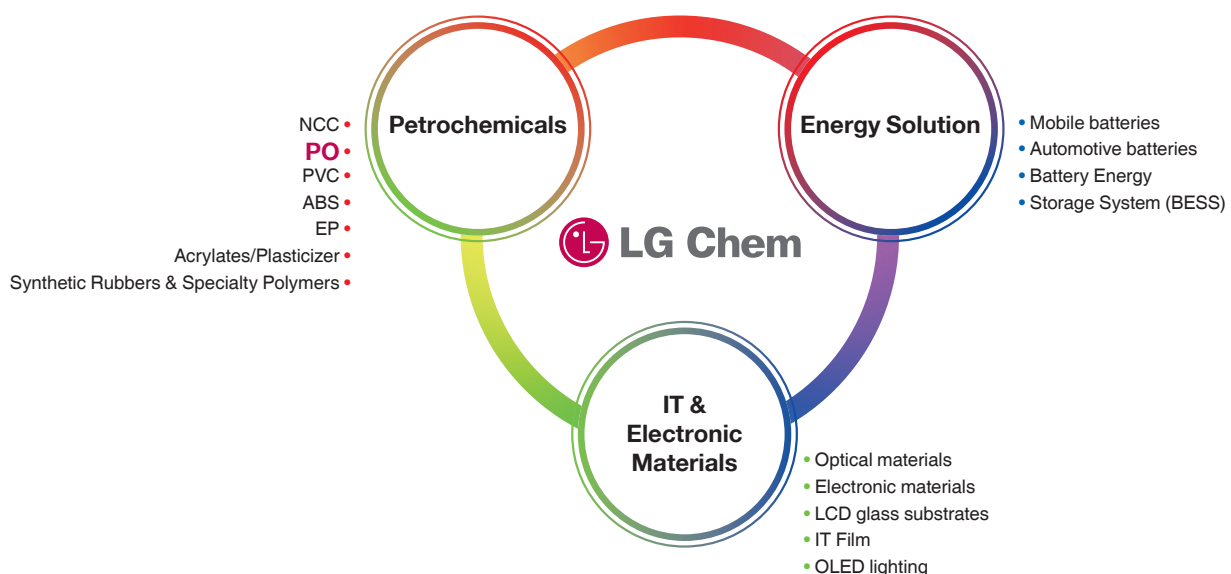


# **LG Wire & Cable Solutions XLPE for Power Cables**



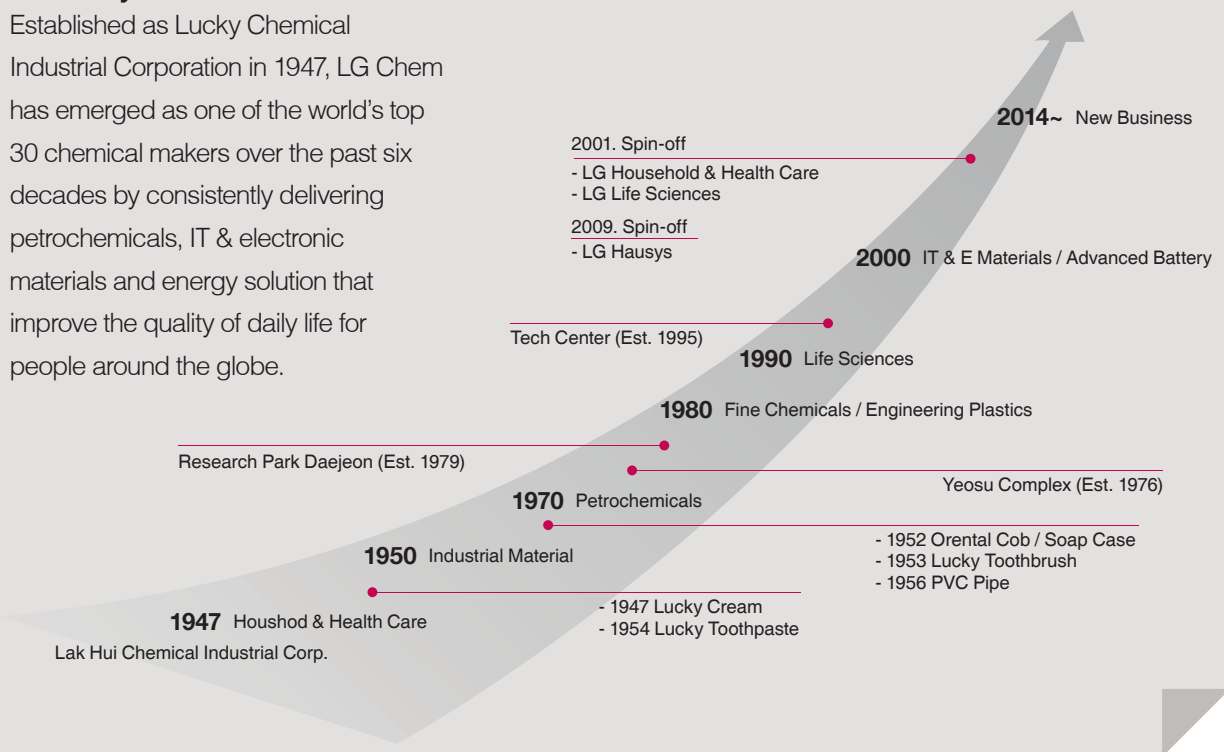
# About LG Chem

LG Chem is playing the role of global solution partner that supports the success of customers in the business areas of Petrochemicals, IT & Electronic Materials, and Energy Solution.



## History

Established as Lucky Chemical Industrial Corporation in 1947, LG Chem has emerged as one of the world's top 30 chemical makers over the past six decades by consistently delivering petrochemicals, IT & electronic materials and energy solution that improve the quality of daily life for people around the globe.



# LG Wire & Cable Solutions

**LUTENE®** Wire & Cable XLPE compounds for power cables are famous for high performance and widely acknowledged by top-tier cable producers. LG Chem has dedicated itself to the cable industry by supplying high performance XLPE with its unique technology.

**LUTENE®** Wire & Cable XLPE compounds show not only excellent electrical and crosslinking properties but also offers outstanding performance in processing.

**LUTENE®** Wire & Cable XLPE compounds offer our dear customers with a wide range of products to meet the diverse requirements in the cable industry.

On a mission to help the world to be better inter-connected, LG Chem is putting emphasis on R&D in the fields of HVDC as well as EHV materials. LG Chem is ready to grow with our customers leading the market.

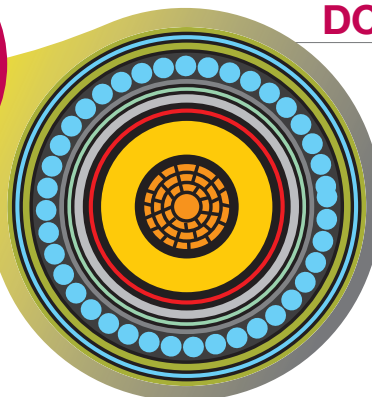


**HV/EHV** Cable Solution



**LG Chem  
Wire & Cable  
Solutions**

**DC** Cable Solution



**MV** Cable Solution

## LUTENE® Insulation XLPE for Power Cables

Grade	Density (g/cm <sup>3</sup> )	Features	Applications
<b>XL8080NRS</b>	0.921	LV & MV ( $\leq 11\text{kV}$ ) Power cable insulation for peroxide cable	Up to 11kV
<b>XL8080NTS</b>	0.921	MV power cable insulation for peroxide cable	Up to 35kV
<b>XL9090NT</b>	0.921	Rapid cure XLPE insulation for peroxide cable	
<b>XL8080TR</b>	0.921	WTR-XLPE insulation for peroxide cable	
<b>XL8080UCS</b>	0.921	HV & EHV insulation for peroxide cable	Up to 230kV (HV & EHV)
<b>XL8080EHV</b>	0.921	HV & EHV insulation for peroxide cable	Up to 400kV (HV & EHV)
<b>XL5050DC</b>	0.921	D.C XLPE insulation for VSC (Voltage Source Converter)	DC & HVDC

## LUTENE® Semicon XLPE for Power Cables

Grade	Density (g/cm <sup>3</sup> )	Features	Applications
<b>XL2808BK</b>	1.13	Conductor & bonded insulation shield	Up to 35kV
<b>XL2810BK</b>	1.13	Conductor & bonded insulation shield (High viscosity)	
<b>XL2700BK</b>	1.17	Strippable insulation shield	
<b>XL2710BK</b>	1.17	Strippable insulation shield (High viscosity)	
<b>XL2808BKTR</b>	1.12	Conductor & bonded insulation shield showing excellent surface smoothness for WTR-XLPE cable	
<b>XL2700BKTR</b>	1.16	Strippable insulation shield showing excellent cross-linking property for WTR-XLPE cable	
<b>XL2802BK</b>	1.12	Conductor & bonded insulation shield	Up to 132kV (HV)
<b>XL2902BK</b>	1.13	Conductor & bonded insulation shield	Up to 400kV (HV & EHV)

# Solutions for High & Extra High Voltage Power Cables

In times of rapidly growing high voltage networks, LG Chem has dedicated itself to help cable makers to meet the complicated needs of their customers.

## LUTENE® Insulation XLPE for HV / EHV provides

- Superior cleanliness : Extremely low level of contamination
- Excellent electrical properties
- Wide range extrusion and excellent processability
- Enhanced scorch resistance

## LUTENE® Semicon XLPE for HV / EHV provides

- Super smoothness surface
- Excellent electrical properties
- Long-run extrusion without scorch



# Material System Recommendation for HV/EHV cables

LUTENE® Insulation XLPE		LUTENE® Semicon XLPE		Applications
Grade	Features	Grade	Features	
XL8080UCS	Ultra-Clean XLPE compound for HV / EHV Power Cable	XL2802BK	Conductor & Bonded Insulation Shield (HV)	HV (up to 132kV)
		XL2902BK	Conductor & Bonded Insulation Shield (HV/EHV)	EHV (up to 230kV)
XL8080EHV	Extra-Clean XLPE compound for EHV Power Cable			EHV (up to 400kV)

## Solutions for Medium Voltage Power Cables

Power distribution networks are demanding more competitiveness to cable makers under current economic hardships. LG is ready to be your solution.

**LUTENE® Insulation/Semicon XLPE for MV power cables offers cable makers the solution with both high-productivity and high-quality materials.**

### LUTENE® Insulation XLPE for MV power cables provides

- Excellent electrical properties
- Very low level of contamination
- Superb processing performance

### LUTENE® semicon for MV power cables provides

- Excellent electrical properties
- Stable conductivity over a wide temperature range
- Excellent extruded surface smoothness



## Material System Recommendation for MV cables

LUTENE® Insulation XLPE		LUTENE® Semicon		
Grade	Features	Bonded Type	Strippable Type	Features
XL8080NTS	Classical	XL2808BK	XL2700BK	Standard viscosity
XL9090NT	Rapid cure	XL2810BK	XL2710BK	High viscosity
XL8080TR	Water tree-retardant	XL2808BKTR	XL2700BKTR	Standard viscosity

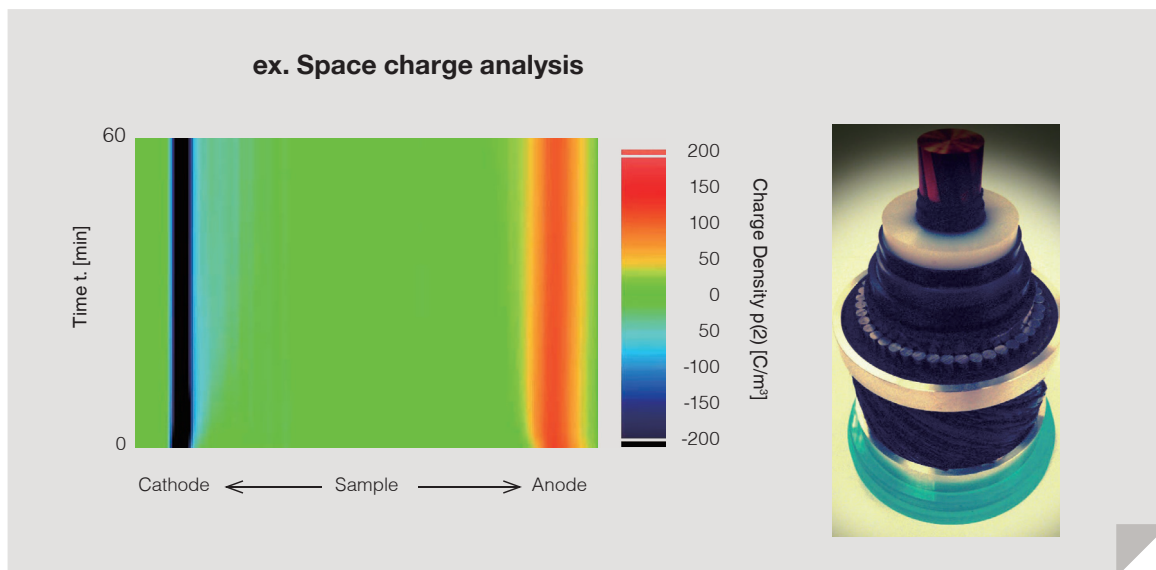
## Solutions for Direct Current(DC) Cables

The need for sustainable & green growth requires powers to be delivered from distant sources which is challenging for cable makers. LG Chem is the right solution.

LUTENE® XL5050DC is a Ultra-clean(UC) version of XLPE for peroxide-cured DC cables and has an extremely low level of contamination. This was specially developed for low space charge accumulation in DC cables. LG Chem is constantly developing materials for the future of our customers.

### The features of LUTENE® XL5050DC for DC cables are

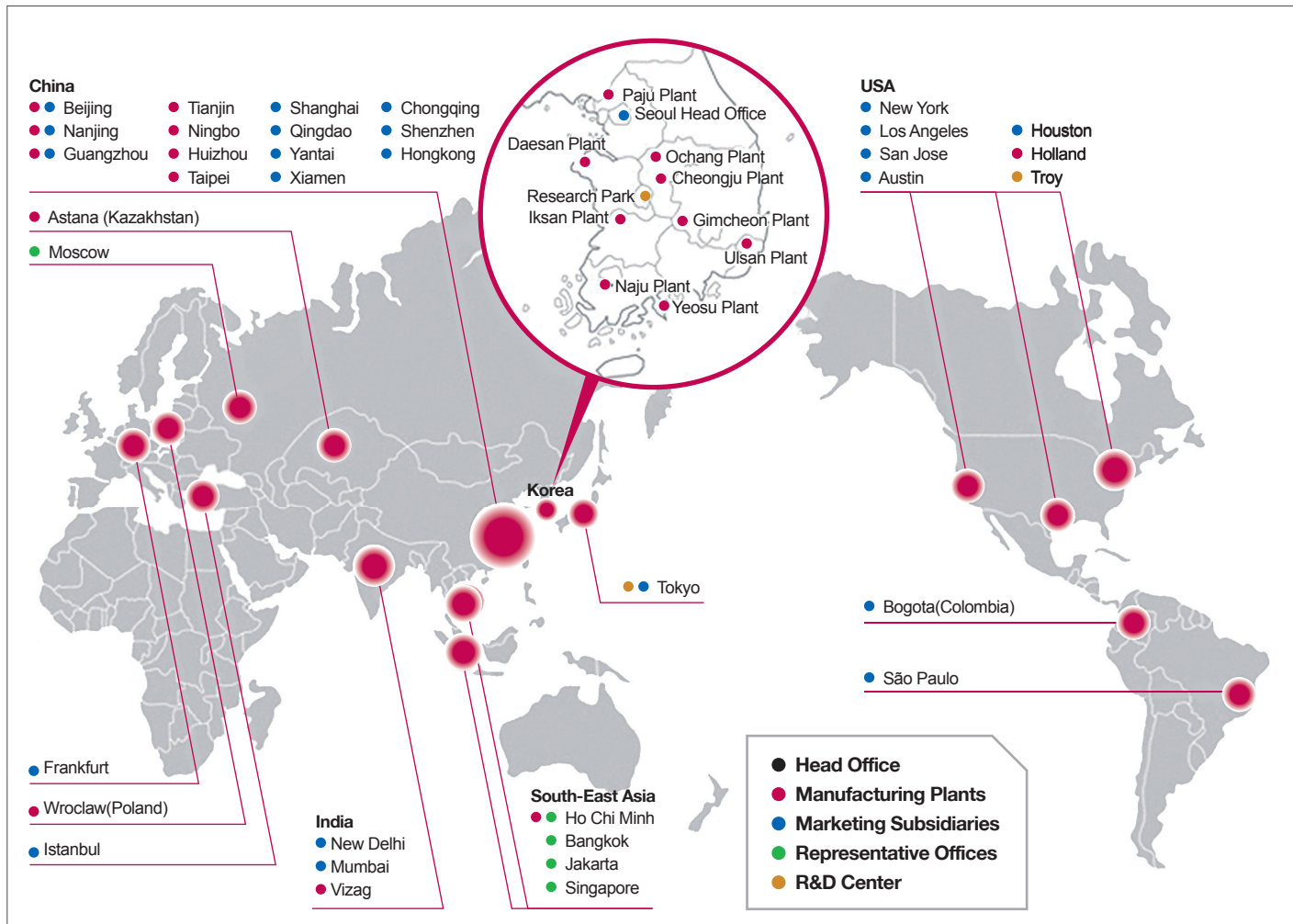
- Superior cleanliness
- Low space charge accumulation
- Longevity of production period
- Enhanced scorch safety



Grade	Density* (g/cm <sup>3</sup> )	MI* (g/10min)	Degree of Crosslinking (%)	Application
<b>XL5050DC</b>	0.92	2.0	min. 80	XLPE insulation for peroxide cured D.C cables

\* Base resin

# Global Network & Contact Information



**LG Chem, Europe GmbH**  
 Lyoner Str 15, 60528 Atricom In Frankfurt.  
 Germany  
 TEL : 49-69-666-5014  
 FAX : 49-69-666-6026

**LG Chem, Moscow Office**  
 Room 1409, Office Building, World Trade  
 Center, 12 Krasnopresnenskaya Nab.  
 Moscow, 123610, Russia  
 TEL : 7-095-258-2335~9  
 FAX : 7-095-258-2340

**LG Chem, America Inc. NewYork Office**  
 920 Sylvan Ave, Englewood Cliffs, NJ  
 07632, USA  
 TEL : 1-201-816-2302  
 FAX : 1-201-816-0961

**LG Chem, America Inc. LA Office**  
 750 The City Drive South Suite# 300  
 Orange, CA 92868, USA  
 TEL : 1-744-620-7689  
 FAX : 1-744-620-7199

**LG Chem, Beijing Office**  
 BEIJING  
 22nd Floor, West Tower, Twin Towers, B-12  
 Jianguomenwai Avenue, Chaoyang District  
 Beijing 100022, PRC  
 TEL : 86-10-6563-2114/2288  
 FAX : 86-10-6563-2121

**QINGDAO**  
 Rm. 1809, Haiyungdongfang Building,  
 No. 15 Qinling Rd., Laoshan District,  
 Qingdao, China  
 TEL : 86-532-8388-7361  
 FAX : 86-532-8388-7869

**LG Chem, Shanghai Office**  
 SHANGHAI  
 F12 Wheelock Square, No 1717, West  
 Nanjing Road, JingAn District, Shanghai  
 200040, PRC  
 TEL : 86-21-6087-2900  
 FAX : 86-21-6087-2951

**NINGBO**  
 Room 607, Nanyuan Hotel, No.2, Lingqiao  
 Road, Ningbo, China  
 TEL : 86-574-8729-5390  
 FAX : 86-574-8729-7338

**LG Chem, Guangzhou Office**  
 Rm 2601, East Tower Fortune Plaza 116  
 Tiyu Donglu, Guangzhou, China  
 TEL : 86-20-3878-1200 ext.124  
 FAX : 86-20-3878-1143

**LG Chem, Taipei Office**  
 4F, No.105, Sec.2, TunHwa South Road,  
 Taipei, Taiwan, R.O.C.  
 TEL : 886-2-2700-9077  
 FAX : 886-2-2709-9151

**LG Chem, HK Ltd.**  
 26/F, 633 King's Road, North Point, Hong  
 Kong  
 TEL : 852-2820-7973  
 FAX : 852-2524-3649

**LG Chem, Singapore Office**  
 No. 8, Temasek Boulevard, #27-01 Suntec  
 City Tower 3, Singapore 038989  
 TEL : 65-6333-6090  
 FAX : 65-6333-6109

**LG Chem, Tokyo RBU**  
 Higashikan 16F, Akasaka Twin-Tower  
 17-22, 2-Chome, Akasaka, Minato-ku,  
 Tokyo, 107-8470 Japan  
 TEL : 83-3584-6545  
 FAX : 83-3224-1545

**LG Chem, New Delhi RBU**  
 AB-3, Safdarjung Enclave New Delhi-  
 110029, India  
 TEL : 91-124-469-2603  
 FAX : 91-124-469-2601

**LG Chem, Hochiminh RBU**  
 8th Floor, Yoco Office Building, 41 Nguyen  
 Thi Minh Khai St., District 1, Hochiminh City,  
 Vietnam.  
 TEL : 84-8-822-0409  
 FAX : 84-8-822-0407

**LG Chem, Jakarta RBU**  
 Jakarta Stock Exchange Building Tower 1,  
 15th Flr, Suite #1502 Jl.Jend Sudirman  
 Kav.52-53 Jakarta 12190, Indonesia.  
 TEL : 62-21-515-1714  
 FAX : 62-21-515-1716

**LG Chem, Istanbul Office**  
 Maslak Nurok Plaza, A Blok 8, Kat  
 Buyukdere Cad. No.71 34398 Maslak,  
 Istanbul, Turkey  
 TEL : 90-212-285-0171/0273  
 FAX : 90-212-285-0274

**LG Chem, America Inc. Sao Paulo Office.**  
 Av.Kr. Chucui Zaidan,940-Torre 11-180  
 Andar Vila Cordeiro-CEP 04583-110-Sao  
 Paulo/sp-Brasil  
 TEL : 55-11-2159-7100/7104  
 FAX : 55-11-2159-7109