# HEXPOL®

### **A MATERIAL DIFFERENCE** *in wire and cable compounds*



# **OUR MATERIAL DIFFERENCE**

The wire and cable industry is a high growth marketplace. With **electrification** trends and an **increasingly connected**, global population the demand for power and telecom products is expanding rapidly.

Alongside this growth comes the introduction of stricter regulations and industry standards to **protect people** and **infrastructure**.

To help industry meet these demands we have put our **50+ years'** experience in polymer compounding into developing one of the most **comprehensive portfolios** in the market. Working with high performance materials such as VMQ, advanced rubber technologies, additives and thermoplastic elastomers (TPE), we offer a unique position, taking a polymer neutral approach to supply you the **optimal solution** for your requirements.

**HEXPOL** is a global polymer group with 45+ production units and R&D laboratories across **Europe**, **Asia-Pacific** and **NAFTA**.

This international footprint and our robust supply chains allow us to **partner companies worldwide**.



### THE MOST COMPREHENSIVE PORTFOLIO

Our portfolio of advanced polymer materials means we offer a one-stop-shop to deliver the best solution for your requirements.



### THE HIGHEST LEVELS OF PRODUCT SAFETY

Industry specific knowledge, robust processes and vigorous testing are part of our daily focus on product safety.



### A GLOBAL NETWORK OF LOCAL SUPPORT

We've a multi-local footprint, giving customers support when and where they need it.

# WHAT WE OFFER

### The technical department is at the heart of what we do.

Our scientists and application engineers lead the way in polymer research and development.

Our teams across the globe are constantly developing **new combinations**, helping create materials that are safer, more durable and more versatile.

Our portfolio includes **silicone rubber** materials, CPE, EPDM, NBR+PVC, CR rubber compounds, pigment and additive masterbatch, as well as thermoplastic, **TPE** and **TPV** technologies.

This brings an extensive list of properties and customisation possibilities and gives wire and cable manufacturers the flexibility to select the best solution for their application.

### **Typical Properties Include**

- HFFR
- Low smoke
- Low toxicity
- Range of hardnesses
- RoHS, SVHC and REACH compliant •
- Thermal stability
- UV resistance •
- Recyclability (TPE) •
- Grades designed to meet international cable standards such as EN50363 or IEC 60811

### **HIGH PERFORMANCE COMPOUNDS**

### **ADVANCED RUBBER COMPOUNDS**

### **ADDITIVES**

**THERMOPLASTIC ELASTOMER (TPE) COMPOUNDS** 

# **APPLICATION AREAS**

Improved **fire performance** with **low toxicity.** 

Our materials provide added security in areas of **high human occupancy**, where people need to be evacuated quickly and safely.

They can also be used in locations containing **expensive or sensitive equipment**. Such as hospitals, airport, train and transport hubs, communication exchanges, power generation facilities and offshore platforms.

By combining quality materials via a hightechnology manufacturing process, we deliver customised materials that help cable manufacturers exceed standards for **reliability** and **durability**.

With enhanced thermomechanical properties we have grades suitable for **telecommunication** and **electric** cables.

**Bedding**, **insulation** and **sheathing** materials are all part of our portfolio.

From high-to-low voltage, large marine cables to thin wires, eMobility to video, our wire and cable materials **help keep the power on and us all connected.**  DATA CABLES

Low voltage (<1KV) cables for network infrastructure, data and control systems.

## LOW VOLTAGE

< 1KV

End user power distribution from substations.

Adjacent-to and within buildings.

### < 60KV

### MEDIUM VOLTAGE

Higher voltage applications.

Transmission or distribution from substation to end users. < 400KV

### HIGH VOLTAGE

Very high voltage applications.

Power generation to transmission substations.

# **TYPICAL GRADES**

Below we show typical grades to demonstrate possibilities, this does not list all available materials. We work with you to develop customised solutions. Please **contact us** to discuss your specific requirements.

GRADE	CATEGORY	OXYGEN INDEX %	TENSILE STRENGTH MPa	ELONGATION AT BREAK %	DESCRIPTION
		ISO 4589-2	ISO 37	ISO 37	
MG9259NE70	Silicone	> 27	8	> 400	Ceramic forming silicone rubber for fire resistant cable
MG5259NE70	Silicone	> 29	8	> 350	Enhanced ceramic forming silicone rubber for fire resistant cable
ALTAIR F1M12 FR	LSZH Thermoplastic	> 38	12	> 180	Halogen free thermoplastic flame-retardant with hot pressure at 80°C
ALTAIR F1M12 FRH	LSZH Thermoplastic	> 38	11	> 180	Halogen free thermoplastic flame-retardant with hot pressure at 90°C
HPC CM EM2 SH	CPE	-	10	> 300	Flame-retardant CPE compound for low voltage sheathing
HPC NPV EM2 SH	NBR/PVC	-	10	> 300	Flame-retardant NBR/PVC compound for low voltage sheathing
Dryflex Cable 52288 N	LSZH EVA	> 42	12	> 150	Low Smoke Zero Halogen, suitable for thin wall applications
Dryflex Cable 52289 N	LSZH EVA	> 40	12	> 200	Low Smoke Zero Halogen, hot pressure at 90°C

DESIGNED TO MEET THE REQUIREMENTS OF THE FOLLOWING SPECIFICATIONS							
	EN 50363 EI2, VDE 0266 HIX1, EN 50200						
	EN 50363 EI2, VDE 0266 HIX1, NFC 32070 CR1						
°C	VDE 0207 Part 24 type HM2						
°C	VDE 0207 Part 24 type HM4						
	UNE EN 50363-2-1 EM2						

UNE EN 50363-2-1, EM2

BS 7655-6.1 LTS 3

BS 7655-6.1 LTS 4

# ADDITIVE & COLOUR MASTERBATCHES

Below we show typical solutions to demonstrate possibilities, this does not list all available materials. We work with you to develop customised materials. Please **contact us** to discuss your specific requirements.

MASTERBATCH SOLUTION	SUITABLE FOR	DOSAGE %	COLOUR CONSISTENCY (ΔΕ)	FORMAT	
HCR Colour Masterbatch	VMQ	1 - 2%	< 1.0	LOG - Continuous String	A
HCR Additive Masterbatch	VMQ	-	-	LOG	H
Thermoset / Thermoplastic Colour Masterbatch	EPDM, NBR, SBS, EVA, LDPE, PP, PVC	2 - 3%	< 1.0	Granules	А

#### DESCRIPTION

Available in standard RAL colours or tailor-made

Heat Stabiliser, Flame Retardant, Anti-blooming

Available in standard RAL colours or tailor-made

# EUROPEAN CENTRES OF EXCELLENCE

For detailed information about products and possibilities we are always here to help, please contact our specialist teams....



### MESGO S.p.A, Gorlago, Italy Silicone Rubber Compounds

**>**+39 035 4252000 **\square info@mesgo.it** 



### **HEXPOL Compounding, Barcelona, Spain**

Advanced rubber, CPE, EPDM, NBR+PVC, CR rubber compounds +34 93 699 86 11 info.bcn@hexpol.com



### **3A MCOM S.R.L, Grigno, Italy**

Thermoplastic HFFR and bedding compounds → +39 03982 816611 ■ info@mesgoiridecolors.it



### MESGO Iride Colors S.r.l, Garlasco, Italy

Additive and pigment masterbatches for silicone, rubber, thermoplastic and PVC cable compounds → +39 0382 816611 info@mesgoiridecolors.it



### HEXPOL TPE, Manchester, UK

Dryflex Cable. LSZH TPE and TPV compounds. Technical EVA compounds. +44 161 654 6616 cable@hexpolTPE.com We provide written and illustrated advice in good faith. This should only be regarded as being advisory and does not absolve customers from doing their own full-scale tests to determine the suitability of the material for the intended applications. You assume all risk and liability arising from your use of the information and/or use or handling of any product. HEXPOL makes no representations, guarantees, or warranties of any kind with respect to the information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. We retain the right to make changes without prior notice. HEXPOL is a trademark of HEXPOL AB, registered or used in many jurisdictions worldwide. All product and company names are trademarks or registered trademarks of their respective holders.





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