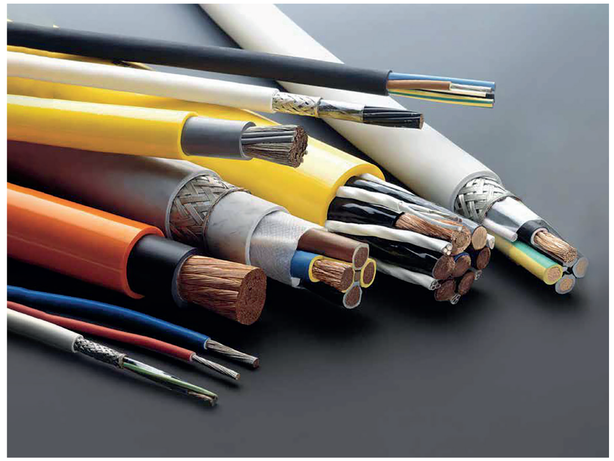
ABHAR
POLYMER
COMPOUNDS



WIRE and CABLE Compounds | (Power and Communication XLPE, Jacketing and HFFR)

PIPE Compounds | Steel Pipe Coating
PEX Pipes and Drip Irrigation

ABHAR POLYMER COMPOUNDS

Abhar Polymer Compounds Co. (APC) is Iran oldest and most reputable polymer compounding plant with nearly three decades of experience. APC is a system company with Abhar Wire and Cable Co. which is by far, the most important supplier of cables to Iran's hydrocarbon industry in addition to catering a large number of other projects.

Utilization the best European production equipment, extensive laboratory facilities, and the services of the country's leading engineers and polymer scientists; APC has been able to produce compounds of the highest quality with a consistency that has made it an irreplaceable supplier to Iran and Middle East's leading companies in wire and cable, automotive, white goods, pipes, and building suppliers.

Our unerring attention to quality and the continuous consistency of our products enable to increase production speeds and reduce scarp, thus providing unrivalled value.

Polyolefin compounds are our specialty. TRUST US.

Wire & Cable

Crosslinkable Polyethylene Compounds for Low Voltage Cable Insulation
Polyethylene Compounds for Jacketing of Communication & Power Cables
Halogen Free Flame Retardant Compounds (HFFR)

Pipe Industry

Polyethylene Compounds for Steel Pipe Coating
Crosslinkable Polyethylene Compound for Heating Pipes (PEX)
Polyethylene Compounds for Drip Irrigation Pipe

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WIRE and CABLE Compounds | (Power and Communication XLPE, Jacketing and HFFR)

CABLE INSULATION COMPOUNDS

Grade	Density	MFI	General Description	Application
APXLP13	0.920±0.005	3.5±0.5	APXLP13 is suitable for insulating low-voltage cables up to 1kV. It is suitable for use in high-speed XLPE cable insulation lines. It can be processed in combination with its catalyst masterbatch (APXLP13- APCAT13N).	Power Cables, Communication Cables, Industrial Applications, Automotive Use
APXLP23	0.915±0.005	4.5±0.5	APXLP23 is suitable for insulating low-voltage cables up to 1kV. It is suitable for use in high-speed XLPE cable insulation lines. It can be processed in combination with its catalyst masterbatch (APXLP23- APCAT13N).	Power Cables, Communication Cables, Industrial Applications, Automotive Use
APXLP12BC	0.935±0.005	4.0±0.5	APXLP12BC is a type of XLPE (Cross-Linked Polyethylene) that crosslinks when exposed to moisture. It can be processed in conventional extrusion machines in combination with its catalyst master batch (APXLP12BC-APCAT12N). It contains 2.5% well-dispersed carbon black to ensure excellent weather resistance.	Electric Distribution Grids, Aerial Bundled Cables

POLYETHYLENE CABLE INSULATION AND JACKETING COMPOUNDS

Grade	Density	MFI	General Description	Application
APJAC03	0.945±0.005	0.30±0.05	STAR-C3 is a natural-colorable high-density polyethylene compound suitable for jacketing purposes. It contains a UV stabilizer to ensure excellent UV protection and an antioxidant to achieve excellent long-term properties.	Electrical Cable and Wire Manufacturing, Electric Power Distribution
STAR-C3-OR	0.945±0.005	0.30±0.05	STAR-C3-OR is a high-density polyethylene compound designed for jacketing applications and is capable of being colored orange. It is formulated with a UV stabilizer to provide exceptional UV protection, and an antioxidant is incorporated to achieve outstanding long-term performance.	Electrical Cable and Wire Manufacturing, Electric Power Distribution
STAR-C3S	0.940±0.005	0.50±0.10	STAR-C3S is a natural-colorable low-density polyethylene compound suitable for jacketing purposes. It contains a UV stabilizer to ensure excellent UV protection and an antioxidant to achieve excellent long-term properties.	Electrical Cable and Wire Manufacturing, Power Distribution and Transmission
STAR-C4	0.935±0.005	0.50±0.05	STAR-C4 is a linear low-density compound designed for the jacketing of power and communication cables. It contains 2.5% well-dispersed carbon black to ensure excellent weather resistance.	Electric Power Distribution, Communication Infrastructure
STAR-C5	0.950±0.005	0.30±0.03	STAR-C5 is a black high-density polyethylene compound suitable for jacketing and insulation purposes. It contains 2.5% well-dispersed carbon black to ensure excellent weather resistance. An antioxidant is added to achieve excellent long-term properties.	Power Distribution and Transmission, Telecommunication Infrastructure

HALOGEN FREE FLAME RETARDANT COMPOUNDS

Grade	Density	LOI	General Description	Application
APLSI	1.45±0.02	32±1	Excellent electrical & mechanical properties	Insulating for LV Power Cables, Communication Cables
APLSJ	1.45±0.02	32±1	Excellent mechanical properties and low water permeability,UVresistance	Jacketing for LVPower Cables, Communication Cables
APLSB	1.50±0.02	32±1	High processability	Jacketing for LV

PIPE Compounds | Steel Pipe Coating PEX Pipes and Drip Irrigation

STEEL PIPE COATING COMPOUNDS

Grade	Density	MFI	General Description	Application
APPOL01	0.948±0.005	0,47±0.03	excellent Strengh and toughness in wide range of temperature(-30 to 85 C) Very good mechanical properties and resistant to stresses caused by soil and environmental factors	Steel Pipe Coating
APTIL01	0.930±0.005	1.5±0.5	Adhesive as tielayer with excellent Strengh and toughness in wide range of temperature, very good mechanical properties	Steel Pipe Coating

PEX PIPE COMPOUNDS

Grade	Density	MFI	General Description	Application
APPEX14	0.945±0.005	2,4±0.3	highcrosslinking density and good surface smoothness, high mechanical properties and performance in processability	PEX/AL/PEX
APPEX24	0.937±0.005	4,3±0.3	High speed production, highcrosslinking density and good surface smoothness, high mechanical properties and performance in processability	PEX/AL/PEX

Crosslinkable Polyethylene Compounds for Low Voltage Cable Insulation

APXLP12 and APXLP13 are moisture-Crosslinkable polyethylene compounds that have offered the preferred insulation for power cable. APXLP12BC is ideal choice for Self-supporting aerial cable. APXLP-insulated cables have: rated maximum conductor temperature of 90°C and an emergency rating of up to 140°C. APXLP compounds art well-suited for most processing techniques and post-curable by steam.

Polyethylene Compounds for Jacketing of Communication G Power Cables

Extra-tough thermoplastic compounds base on nigh density polyethylene or liner low density polyethylene, to be used as insulation or sheathing in wire and cable industries. APJAC arades are ideal choice for power cables sheathinc and APINS arad offers solutions for telecom insulation and jacketing. APJAC is characterized by excellen environmental stress crack performance along with excellent processabili-ty during extrusion, high thermal stabilit and UV resistance.

Halogen Free Flame Retardant Compounds (HFFR)

Our proprietary APLS are halogen free flame retardant (HFFR) compounds, that exhibit reduced heat release and smoke generation. and produce no corrosive das emissions. These reduced hazard materials decrease the risk to health and life as well as secondary fire damage to equipment and installations. Our excellent characteristic compounds offe a wide range of applications as Low volt-age power cables, Control & data cables, coaxial cables, Optical cable and alsc contribute to environmental sustainability.

Crosslinkable Polyethylene Compound for Heating Pipes

APPEX 14 and APPEX 15 are two-step, silane-grafted, moisture cross-linkable high density polyethylene system (XLPE). These products allows for a distinct advantage over regular polyethylene: greatly improved heat resistance. Made by following the Sioplas two-step technology. EX pipes manufactured by APPEX have features include: Excellent heat resistance to 90°C, Excellent environmental stress crack resistance (ESCR), High resistance to scratch, abrasior and chemical functions. Good resistance to rapid propagation of tension. Excellent creep resistance to 95°C.

High Density Polyethylene Compounds for Steel Pipe Coating

Corrosion protections of underground pipelines are performed by corrosion protective coatings and cathodic protection system at the same time. APPOL product from abhar polymer compounds is based on high densit polyethylene, which used in order to protect corrosion in the pipeline industries. APPOL features include: Excellent Strength and toughness in wide range of temperature (-30 to 85°C), High resistance to weather conditions, Excellent resistance against chemical agents, Very good mechanical properties, Very low consumption of electrical energy at cathodic protection due to good dielectric properties.

	Melt Flow Index (gr/10min)			Density (gr/cm^3)	Tensile Strength (Mpa)	Elongation at Break (%)	Tensile Strength at Yield (Mpa)	Hardness Shore D	LOI	Vicat Temperature (°C)	Thermal Ageing	Brittleness Temperature	Water Content	Volume Resistivity	Melting Point	E.S.C.R (hr) 50°c.Cond.B -10% Igepal	Carbon Black Content(%)	Gel Content	Carbon Black Dispersion	Hot Set Elongation Under Load (%) Permanent Elongation after Cooling (%)		Ageing Tensile Strength Elongation at Break	O.I.T	
	190 C/2.16kg	190 C/5kg	150 C/21.6kg																	0.2 MPa	0.3 MPa		220°c	200°c
APXLP12 BC	-	4±0.5	-	0.930±0.005	≥23	≥500	-	52±2	-	-	-	-	-	-	-	-	2.5	-	-	- -	100 15	25 [1] 25	-	-
APXLP13	-	3.5±0.5	-	0.920±0.005	≥26	≥500	-	54±2	-	-	-	-	-	-	-	-	-	-	-	100 15	- -	25 [1] 25	-	-
APXLP23	-	4.5±0.5	-	0.920±0.005	≥25	≥500	-	54±2	-	-	-	-	-	-	-	-	-	-	-	100 15	- -	25 [1] 25	-	-
APJAC03	0.32±0.02	-	-	0.940±0.005	≥29	≥800	-	58±2	-	-	-	<-70	-	10 [16]	-	>5000	-	-	-	- -	- -	10 10	-	min 30
APJAC04	0.5±0.03	-	-	0.938±0.003	≥29	≥900	-	54±2	-	-	-	<-70	-	10 [15]	-	>1000	-	-	-	- -	- -	10 10	-	-
APJAC05	0.3±0.02	-	-	0.945±0.005	≥27	≥900	-	58	-	-	-	<-70	-	10 [16]	-	>5000	2.5	-	max 2.5	- -	- -	10 10	-	min 30
APLSI01	-	-	7±2	1.45±0,02	≥12	≥200	-	53±2	32	-	-	-	-	-	-	-	-	-	-	- -	- -	25 [3] 25	-	-
APLSJ01	-	-	7±2	1.45±0,02	≥12	≥200	-	53±2	32	-	-	-	-	-	-	-	-	-	-	- -	- -	25 [3] 25	-	-
APLSB01	-	-	5±2	1.47±0,02	≥13	≥180	-	55±2	32	-	-	-	-	-	-	-	-	-	-	- -	- -	- -	-	-
APPOL01	0.47±0.03	2.4±0.3	-	0.948±0.005	≥23	≥800	≥19	59±2	-	≥120	ΔMFI≤35	<-70	≤0.05	-	125	>1000 [4]	2.5	-	max 2.5	- -	- -	- -	min 30	-
APPEX14	-	-	-	0.945±0.005	≥27	≥500	-	-	-	-	-	-	-	-	-	-	-	min 65	-	- -	- -	- -	-	-
APPEX24	-	4.3±0.3	-	0.937±0.005	≥23	≥500	-	-	-	-	-	-	-	-	-	-	-	min 65	-	- -	- -	- -	-	-
APTIL01	1.5±0.5	-	-	0.930±0.005	≥17	≥600	-	58±2	-	104±3	-	-	-	-	138±5	-	-	-	-	- -	- -	- -	-	min 30