



TESC

Pipe Catalog

About Us

Trade and Economy Solution Group (TESG) is well-positioned to utilize its strong legal and financial foundation, extensive communication infrastructure, and business network to assist clients in trading various components.

With our wealth of experience and resources, we have the ability to oversee all aspects of general trading, including marketing, negotiating contracts, making product sales, managing logistics, handling financial transactions, managing customers, providing customs services, as well as sales and procurement engineering. Moreover, we excel in offering a wide range of essential services to ensure that each component is traded globally at the highest quality standards.

Polymer & Petrochemical Department

The integration of polymers into everyday life has reached unprecedented levels, a trend that continues to accelerate. Across various industrial sectors, from water and energy transfer to automotive design and manufacturing, polymers have enabled the development of innovative solutions to a range of complex challenges.

Today, the application of polymers has expanded significantly in comparison to metal and mineral materials, a trajectory that is expected to persist. TESG with its extensive experience in international markets, is poised to guide companies through the rapid development and expansion of polymer products. By creating value across the supply chain, TESG can provide tailored solutions to meet the specific needs of this dynamic industry.

Cross-linkable Polyethylene Compounds (PEX)

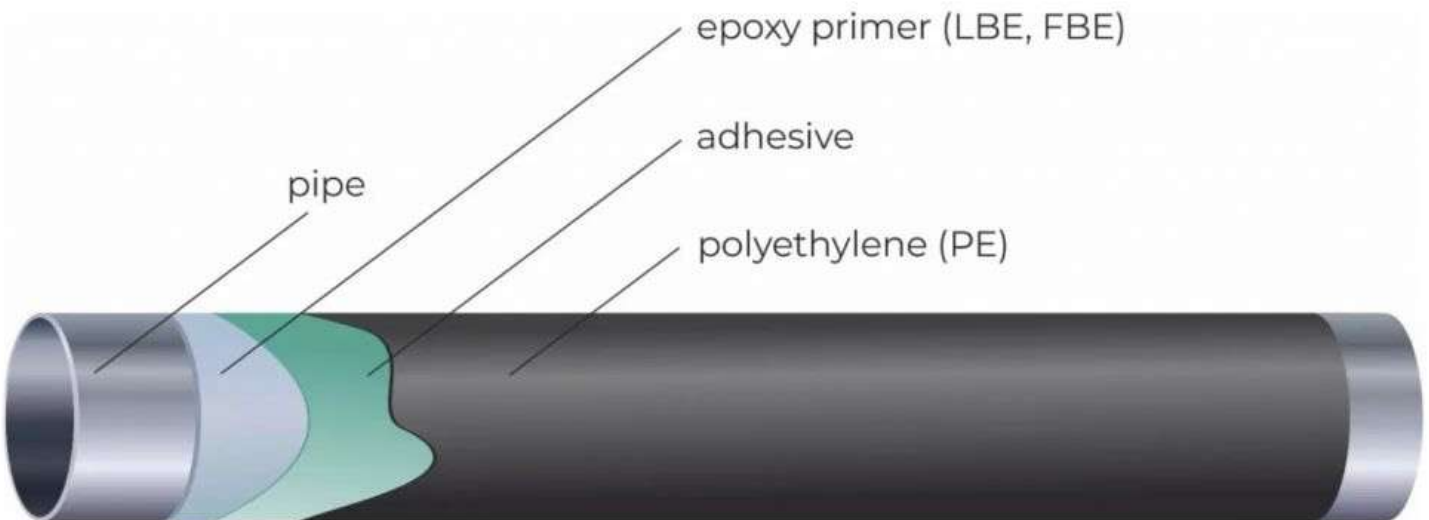
The provided PEX compounds are a two-step, silane-grafted, moisture cross-linkable high-density polyethylene system (Sioplas technology) used to produce single-layer and multi-layer pipes with improved heat resistance. The PEX pipes offer excellent heat resistance up to 90°C, exceptional environmental stress crack resistance (ESCR), high resistance to scratches, abrasion, and chemicals, as well as good resistance to rapid tension propagation and excellent creep resistance up to 95°C. Our products adhere to stringent standards (ASTM F1281, ISO 15875, and DIN 16892) for single and multi-layer pipes.

PEX Compounds	General Description	Density (g/cm ³)	MFI (gr/10min)	Application
TBP-1600	HDPE-based compound for heating and drinking system	0.945	5.5	Multi-layer
TGP-1400	High cross-link density with smooth surfaces, excellent mechanical properties and good processability	0.945	1.2	Multi-layer
TBP-1630	MDPE-based compound, with the capability of ambient temperature	0.945	1.5	Single-layer
TGP-1500	High cross-link density with smooth surfaces, excellent mechanical properties and good processability	0.945	0.5	Single-layer
TBP-1690	Ambient curing, high flexibility for the production of flexible hoses	0.895	3	Multi-layer

Steel pipe coating

The protection of underground pipelines from corrosion necessitates the use of both corrosion-resistant coatings and cathodic protection systems. Coating compounds for steel pipes are mainly based on HDPE, employed to ensure cohesion within the pipeline industry. This product offers several key features, including excellent strength and toughness across a broad temperature range (-30 to 85°C), high resistance to various weather conditions, exceptional chemical resistance, robust mechanical properties, and low energy consumption in cathodic protection owing to favorable dielectric properties.

Steel Pipe Coating	General Description	Density (g/cm ³)	MFI (gr/10min)	Application
TGP-SC01	Protective coating for steel pipe	0.94	0.3	Steel pipe coatings





Yellow PE Compound (PE100)

Polyethylene, specifically PE-100, is a key material for manufacturing water, sewage, and gas pipes due to its corrosion resistance, low weight, flexibility, good flexibility, earthquake resistance, UV resistance and resistance to crack propagation (ESCR). It is recommended for pressure pipe systems in natural gas and water supply applications.

PE-100	General Description	Density (g/cm ³)	MFI (gr/10min)	O.I.T (min)	Color	Application
TRP-100	Bimodal HDPE compound for pipe production	0.951	0.25	70	Orange Yellow	Gas and water pipe system



CRP 100 Black (PE100)

The combination of raw polyethylene and black masterbatches to produce polymeric pipes had some disadvantages in the past, such as a heterogeneous black pigment distribution, which reduced pipe quality and shortened the lifespan. Although this strategy is still adopted for manufacturing pipes, it is emphasized that black color compounds are to be employed to produce polyethylene pipes, particularly gas pipes of more strict safety. CRP 100 black is a black color compound for using advanced manufacturing systems to offer high-quality products at international standard levels.

CRP-100	General Description	Density (g/cm ³)	MFI (gr/10min)	O.I.T (min)	Color	Application
TCP-100	PE100 based compounds	0.952	0.23	55	Black	Gas and water pipe system



Black PE Compound (PE40)

These black LDPE compounds are formulated with micronized carbon black and thermal stabilizers to enhance thermal and sunlight resistance for pipeline production. This compound exhibits excellent environmental stress cracking resistance (ESCR). The other advantages of utilizing low-density polyethylene (LDPE) are prolonged durability, non-toxicity, resilience to freezing temperatures, exceptional corrosion resistance, and a wide range of chemical substances.

PE-40	General Description	Density (g/cm ³)	MFI (gr/10min)	O.I.T (min)	Application
TRP-40	LDPE-based compound for pipe production	0.93	0.5	30	Swage, Water, and other chemicals pipeline
TGP-DI	LLDPE-based compound for Drip irrigation agricultural pipe	0.94	0.4	-	Drip irrigation pipe
TNP-40	good strength in hydrostatic pressure and excellent ESCR	0.93	0.45	20	Drip irrigation and water pipe



Polyethylene Raised Temperature Compounds (PE-RT)

PE-RT pipes are constructed from polyethylene and can endure high water temperatures without requiring cross-linking for strength. They are frequently utilized in radiator and underfloor heating connections, as well as in power plants for water supplies. The material's flexibility enables easy cutting and bending to accommodate heating and cooling systems, making it a superior choice over traditional polyethylene.

PE-RT	General Description	Density (g/cm ³)	MFI (gr/10min)	Color	Application
TBP-2750	Suitable for inner and outer layers of pipes	0.95	1.5	Natural	Single-layer and five-layer pipes



Catalyst Masterbatch

This polyolefin-based masterbatch contains a catalyst and is designed for use in cross-linked polyethylene compounds used in cable and pipe industries (XLPE and PEX). Its main purpose is to speed up and enhance the crosslinking process during production, thereby improving the overall performance of the final product.

Catalyst Masterbatch	General Description	Density (g/cm ³)	MFI (gr/10min)	Application
TBcat-2200	Specific for TBP-1600,1615,1630 and 1650 compounds	0.94	4	PEX Compounds for pipe
TBcat-2210	High aging resistance, used with TB-XL1510 and 1520	0.92	3.5	XLPE Compounds for cables
TBcat-2220	Highly resistant to oxidation and pre-heat treatment, low copper destructive effect, used with TB-XL1510 and 1520	0.92	4	XLPE Compounds for cables
TBcat-2230	Highly resistant to oxidation and pre-heat treatment, used with TB-XL1501 and 1502	0.92	6	XLPE Compounds for cables
TBcat-2240	Highly resistant to oxidation and pre-heat treatment, insulating the power cable	0.92	3.5	XLPE Compounds for cables



Polyolefin Adhesives

Polyolefin adhesive make polar and non-polar materials adhere to each other and improve adhesion and mechanical properties. This product applies to join the metal layer to the plastic layer in multilayer pipes.

PO adhesive	General Description	Density (g/cm ³)	MFI (gr/10min)	Application
TBadv-1800	Multilayer adhesive for multilayer pipes PEX-AL-PEX	0.94	1.5	Composite pipes
TBadv-1810	Multilayer adhesive for multilayer pipes PEX-AL-PEX	0.94	2.5	Composite pipes
TBadv-1820	Special adhesive for coating multilayer oil and gas transfer steel pipe	0.94	1.4	Composite pipes
TBadv-1830	Special adhesive for coating multilayer oil and gas	0.94	2.3	Composite pipes



Polyethylene powder 3840

Polyethylene 3840 is used to manufacture water and chemical tanks and, in general, in roto molding systems to manufacture tanks. This product is manufactured by the addition of pigments and other additives to polyethylene 3840 in the extruder and powdering the resulting granules so the compound can be used in roto molding systems.

PE 3840	General Description	Hardness (Shore D)	Density (g/cm ³)	MFI (gr/10min)	Application
TCP-3840	Compounds for roto molding systems	65	0.938	4	Water tanks

Contact Info

Please feel free to contact us for any additional information and technical consultation. We have the capability to provide you with a customized product of superior quality at a competitive cost.



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