

Advanced Polymer Compound & Masterbatch

Innovative Polymer Nanotechnology



Produced By :
NANO KARA FARAZ CO.

Who We Are?

Nano Kara Faraz Co. specializes in the development, production and trading of advanced polymer compounds and nanocomposites, leveraging cutting-edge scientific knowledge and the expertise of a highly skilled team. Our core mission is to supply high-performance polymer compounds and masterbatches, and specialized nanocomposites while delivering innovative, practical solutions tailored to the evolving needs of various industries including automotive, packaging, construction and road engineering, home appliances, cosmetics and personal care, medical devices, and industrial equipment.

Through the design and production of reinforcing polymer compounds and nanocomposites, as well as industrial additives, we play a key role in improving product quality, reducing production costs, and enhancing the performance of industrial processes. Backed by advanced research and development infrastructure, we have the capability to develop customized formulations and solutions precisely aligned with the technical requirements of each industry.

Main Activities & Services

- Formulation and Production of Polymer Compounds and Masterbatches
- Development and Production of Advanced Nanomaterials and Nanocomposites
- Industrial Problem-Solving and Process Optimization
- Key Areas of Specialty Product Trading



We Are Committed To:

- Developing up-to-date formulations to meet the specific needs of various industries
- Expanding the frontiers of technology through international and research collaborations
- Producing and exporting high-quality products to enhance competitiveness in global markets
- Upholding professional ethics and sustainable development principles to responsibly fulfill our commitments



Introduction

PE100 pipe compound is a high-performance HDPE-based material, specially formulated with carbon black, antioxidants, and thermal stabilizers to meet the stringent requirements of pressure pipe applications. Designed for the extrusion of water, gas, and sewage pipes, this compound offers excellent long-term hydrostatic strength, UV resistance, and chemical durability. It fully complies with international standards such as ISO 4427 and EN 12201, making it a reliable choice for modern infrastructure systems.

Description

HWP-100 is a general-purpose HDPE compound (equivalent to PE100 class) engineered for pressure pipe applications. HWP-100 offers excellent processability, long-term hydrostatic strength, mechanical strength, ESCR, and good temperature-pressure resistance.

General

Form: Black Pellets

Process: Extrusion

Application: PE100 class pipes, Water pressure pipes, Industrial and sewage pipelines

Additives: AO, PPA, Carbon Black

Packaging: 25 kg sack / 850 kg big bag



Properties

Property	Test Method	Unit	Result
Density	ISO 1183	g/cm ³	0.945±0.005
Melt Flow Index (190°C/5kg)	ISO 1133	g/10 min	0.23±0.02
Tensile Strength at Break	ISO 527	MPa	28
Elongation at Break	ISO 527	%	700
Carbon Black Content	ISO 6964	%	2.3
Oxidation Induction Time	ISO 11357	min	30
Vicat Softening Temperature	ISO 306	°C	128
Hydrostatic Strength (@80°C)	ISO 1167	h	>165
ESCR (50°C, F50)	ISO 22088	h	>1000



Introduction

PE40 is an advanced polyethylene compound tailored for modern piping solutions. With superior processability and reinforced durability, it ensures smooth production and reliable long-term performance. Formulated with high stress crack resistance (ESCR), excellent chemical stability, and UV protection, this compound guarantees pipes that stand the test of time in demanding environments. PE40 is the trusted choice for water distribution, irrigation systems, and medium-pressure pipelines where quality and consistency are essential.

Description

DPW-424 is a specialized formulation of HDPE compound designed for the production of drip irrigation pipes to supply reliable agricultural water delivery systems. DPW-424 combines excellent mechanical strength, controlled flexibility, long-term UV/weathering resistance, smooth surface finish, and high temperature & pressure resistance.

General

Form: Black Pellets

Process: Extrusion

Application: Drip irrigation pipe and tube, Emitting and drainage systems

Additives: AO, PPA, Carbon Black

Packaging: 25 kg sack / 850 kg big bag



Properties

Property	Test Method	Unit	Result
Density	ISO 1183	g/cm ³	0.945±0.005
Melt Flow Rate (190°C/2.16kg)	ISO 1133	g/10 min	0.6±0.2
Carbon Black Content	ISO 6964	%	2.3
Tensile Strength at Break	ISO 527	MPa	22
Elongation at Break	ISO 527	%	750
Hardness	ISO 868	Shore D	58
Vicat Softening Temperature	ISO 306	°C	127
Oxidation Induction Time	ISO 11357	min	30
ESCR (50°C, F50)	ISO 22088	h	>1000



Introduction

Drip irrigation tape compound is specially formulated from premium polyethylene resins and enhanced stabilizers to deliver superior tensile strength, flexibility, and long-term UV resistance. Its excellent processability ensures uniform extrusion and consistent tape performance, while its durability in harsh agricultural conditions makes it a cost-effective and reliable choice for modern drip irrigation systems.

Description

DTW-414 is a formulated LL/HDPE compound engineered for the production of drip irrigation tape to provide reliable water delivery performance for agricultural and greenhouse. DTW-414 exhibits excellent processability, long-term UV/weathering resistance, smooth surface finish, and good temperature & pressure stability.

General

Form: Black Pellets

Process: Extrusion

Application: Drip irrigation tape, tube, and rain hose

Additives: AO, PPA, Carbon Black

Packaging: 25 kg sack / 850 kg big bag



Properties

Property	Test Method	Unit	Result
Density	ISO 1183	g/cm ³	0.940±0.005
Melt Flow Rate (190°C/2.16kg)	ISO 1133	g/10 min	0.5±0.2
Carbon Black Content	ISO 6964	%	2
Tensile Strength at Break	ISO 527	MPa	20
Elongation at Break	ISO 527	%	900
Hardness	ISO 868	Shore D	57
Vicat Softening Temperature	ISO 306	°C	125
Oxidation Induction Time	ISO 11357	min	30
ESCR (50°C, F50)	ISO 22088	h	>1000



Introduction

Cable jacket compound is a high-performance polymer formulation specifically engineered for insulating and protecting low- and medium-voltage cables. Designed for excellent mechanical strength, flexibility, and thermal stability, it ensures reliable performance under demanding conditions. The compound provides superior resistance to abrasion, chemicals, UV exposure, and environmental aging, while maintaining consistent processability for extrusion and molding operations. Ideal for power, communication, and industrial cables, this compound combines durability, safety, and ease of manufacturing for long-lasting, high-quality cable jackets.

Description

LCS-313 is a high-performance HDPE compound engineered for low-voltage power and communication cable sheathing/jackets. LCS-313 offers excellent mechanical & electrical properties, UV/weathering resistance, stable melt strength, smooth surface finish, and outdoor durability.

General

Form: Black Pellets

Process: Extrusion

Application: Power & control cable jackets, Outdoor communication cable sheaths

Additives: AO, PPA, Carbon Black

Packaging: 25 kg sack / 850 kg big bag



Properties

Property	Test Method	Unit	Result
Density	ISO 1183	g/cm ³	0.945±0.005
Melt Flow Rate (190°C/2.16kg)	ISO 1133	g/10 min	0.8±0.2
Carbon Black Content	ISO 6964	%	2.3
Tensile Strength at Yield	ISO 527	MPa	24
Elongation at Break	ISO 527	%	800
Hardness	ISO 868	Shore D	58
Melting Point	ISO 11357	°C	127
Oxidation Induction Time	ISO 11357	min	30
ESCR (50°C, F50)	ISO 22088	h	>1000



Introduction

Telecommunication and network cable coating compound is engineered from premium-grade polyethylene resins and advanced additives to deliver outstanding electrical insulation, mechanical strength, and long-term environmental resistance. Designed for smooth extrusion and precise coating, it ensures signal integrity, protection against moisture and abrasion, and reliable performance in high-speed data and communication applications.

Description

TCS-820 is a high-performance LL/HDPE compound specifically formulated for telephone and network cable sheathing/jackets. TCS-820 offers excellent processability, mechanical & electrical properties, smooth surface finish, and long-term dimensional stability.

General

Form: Natural Pellets

Process: Extrusion

Application: Telephone & network cable jackets

Additives: AO, PPA

Packaging: 25 kg sack / 850 kg big bag



Properties

Property	Test Method	Unit	Result
Density	ISO 1183	g/cm ³	0.945±0.005
Melt Flow Rate (190°C/2.16kg)	ISO 1133	g/10 min	0.7±0.2
Tensile Strength at Yield	ISO 527	MPa	22
Elongation at Break	ISO 527	%	900
Hardness	ISO 868	Shore D	57
Melting Point	ISO 11357	°C	124
Oxidation Induction Time	ISO 11357	min	30
ESCR (50°C, F50)	ISO 22088	h	>1000



Introduction

Geomembrane sheet compound is engineered from high-density polyethylene resins with advanced stabilizers and performance additives, providing outstanding chemical resistance, mechanical strength, and long-term UV and environmental durability. Its optimized formulation ensures smooth extrusion, uniform sheet thickness, and reliable impermeability, making it an ideal solution for efficient, cost-effective, and sustainable applications in water containment, waste management, and environmental protection projects.

Description

HGS-640 is an engineered formulation of LL/HDPE compound designed for the production of high-performance geomembrane sheets used in environmental protection, civil engineering, and water management applications. HGS-640 shows outstanding chemical and mechanical resistance, long-term durability and ESCR, smooth surface finish, and excellent UV and thermal stability.

General

Form: Black Pellets

Process: Extrusion

Application: Geomembrane liners for water storage, aquaculture pools, environmental protection

Additives: AO, PPA, Carbon Black

Packaging: 25 kg sack / 850 kg big bag



Properties

Property	Test Method	Unit	Result
Density	ISO 1183	g/cm ³	0.95±0.005
Melt Flow Rate (190°C/5kg)	ISO 1133	g/10 min	0.6±0.2
Carbon Black Content	ISO 6964	%	2.3
Tensile Strength at Break	ISO 527	MPa	28
Elongation at Break	ISO 527	%	800
Vicat Softening Temperature	ISO 306	°C	127
Oxidation Induction Time	ISO 11357	min	120
Tear Resistance	ISO 6383	N	>250
ESCR (50°C, F50)	ISO 22088	h	>1000



Introduction

Steel pipe coating compound is formulated from high-performance polymers and specialized additives to deliver superior adhesion, corrosion resistance, and mechanical protection. Engineered for smooth application and long-term durability, it provides reliable protection against moisture, chemicals, and environmental stress, ensuring extended service life for steel pipelines in oil, gas, water, and industrial infrastructure projects.

Description

TSP-535 is a high-performance HDPE compound engineered for three-layer polyethylene (3LPE) steel pipeline coating. TSP-535 exhibits high impact and abrasion resistance, excellent mechanical & thermal protection, long-term corrosion protection under aggressive soil and environmental conditions.

General

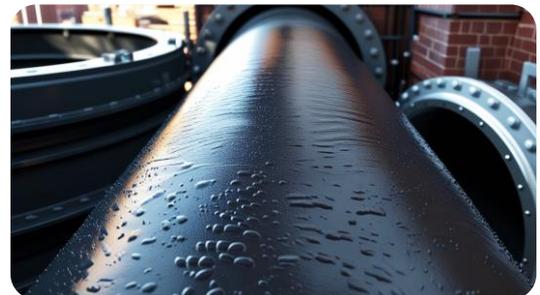
Form: Black Pellets

Process: Extrusion

Application: External coating for oil, gas, and water transmission pipelines

Additives: AO, PPA, Carbon Black

Packaging: 25 kg sack / 850 kg big bag



Properties

Property	Test Method	Unit	Result
Density	ISO 1183	g/cm ³	0.945±0.005
Melt Flow Rate (190°C/2.16kg)	ISO 1133	g/10 min	0.6±0.2
Carbon Black Content	ISO 6964	%	2.3
Tensile Strength at Yield	ISO 527	MPa	24
Elongation at Break	ISO 527	%	800
Hardness	ISO 868	Shore D	60
Melting Point	ISO 11357	°C	128
Oxidation Induction Time	ISO 11357	min	60
ESCR (50°C, F50)	ISO 22088	h	>1000



Introduction

Corrugated pipe compound is an advanced polymer formulation specifically designed for the production of flexible, impact-resistant, and environmentally stable corrugated pipes. This compound, enhanced with advanced additives and stabilizers, provides high mechanical strength, long-term durability, and the ability to withstand external pressures and soil corrosion. The precise scientific formulation combined with industrial efficiency makes it an ideal choice for manufacturing sewage, drainage, and cable protection pipes, ensuring superior product quality while optimizing production performance.

Description

HCP-910 is an engineered HDPE compound formulated for the production of corrugated pipes. HCP-910 combines excellent processability, long-term mechanical & ESCR stability, high flexibility, good weather and corrosion protection.

General

Form: Black Pellets

Process: Extrusion

Application: Industrial corrugated pipes

Additives: AO, PPA, Carbon Black

Packaging: 25 kg sack / 850 kg big bag



Properties

Property	Test Method	Unit	Result
Density	ISO 1183	g/cm ³	0.95±0.005
Melt Flow Rate (190°C/5kg)	ISO 1133	g/10 min	0.9±0.3
Carbon Black Content	ISO 6964	%	2.3
Tensile Strength at Yield	ISO 527	MPa	24
Elongation at Break	ISO 527	%	700
Hardness	ISO 868	Shore D	60
Melting Point	ISO 11357	°C	128
Oxidation Induction Time	ISO 11357	min	30
ESCR (50°C, F50)	ISO 22088	h	>1000



Introduction

XLPE cable jacket compound is a high-performance polymer formulation engineered for insulation and protective sheathing of electrical cables. Designed with advanced crosslinking agents and stabilizers, this compound delivers exceptional thermal, chemical, and mechanical resistance, ensuring long-term reliability and safety in low- and medium-voltage applications. Its precise formulation provides excellent electrical insulation, flexibility, and durability under harsh environmental conditions.

Description

XBC-955 is a high-performance cross-linkable polyethylene (XLPE) compound specifically engineered for the production of low & medium voltage power cable applications. Upon exposure to appropriate curing conditions (moisture, heat, or catalyst systems), the XBC-955 providing superior thermal, mechanical, and electrical properties.

General

Form: Natural Pellets

Process: Extrusion

Application: Cables, Wires, Insulation applications

Additives: AO, PPA, Catalyst

Packaging: 25 kg sack



Properties

Property	Test Method	Unit	Result
Density	ISO 1183	g/cm ³	0.935±0.005
Melt Flow Rate (190°C/2.16kg)	ISO 1133	g/10 min	1.5±0.5
Tensile Strength at Yield	ISO 527	MPa	22
Elongation at Break	ISO 527	%	700
Hardness	ISO 868	Shore D	58
Melting Point	ISO 11357	°C	127
Oxidation Induction Time	ISO 11357	min	60
ESCR (50°C, F50)	ISO 22088	h	>1000
Gel Content (Cross-linked after curing)	ISO 10147	%	≥65



Introduction

PEX pipe compound is an advanced polymer formulation specifically designed for the production of flexible, heat- and pressure-resistant pipes. Enhanced with modern crosslinking agents and stabilizers, this compound delivers exceptional mechanical and thermal properties while ensuring resistance to environmental stress, corrosion, and internal pressure. The precise scientific formulation combined with industrial efficiency makes it an ideal choice for manufacturing hot and cold water pipes, heating and cooling systems, and various industrial applications, ensuring superior product quality while optimizing production performance.

Description

XBP-595 is a high-performance cross-linkable polyethylene (PEX-b) compound specifically engineered for the production of pressure pipes, fittings, and under-floor heating systems. Upon exposure to appropriate curing conditions (moisture, heat, or catalyst systems), the XBP-595 undergoes controlled cross-linking network, resulting in excellent thermal, mechanical, and chemical resistance properties.

General

Form: Natural Pellets

Process: Extrusion

Application: Hot & cold water pipes, Underfloor and radiator heating systems

Additives: AO, PPA, Catalyst

Packaging: 25 kg sack



Properties

Property	Test Method	Unit	Result
Density	ISO 1183	g/cm ³	0.945±0.005
Melt Flow Rate (190°C/5kg)	ISO 1133	g/10 min	1.5±0.5
Tensile Strength at Yield	ISO 527	MPa	25
Elongation at Break	ISO 527	%	700
Hardness	ISO 868	Shore D	60
Melting Point	ISO 11357	°C	129
Oxidation Induction Time	ISO 11357	min	60
ESCR (50°C, F50)	ISO 22088	h	>1000
Gel Content (Cross-linked after curing)	ISO 10147	%	≥65



Introduction

PERT pipe compound is an advanced polymer formulation designed for the production of high-performance, flexible, and durable pipes. Engineered with specialized stabilizers and additives, this compound offers excellent thermal resistance, long-term mechanical strength, and superior dimensional stability, making it ideal for hot and cold water distribution, radiant heating systems, and industrial piping applications.

Description

TRP-780 is an optimized formulation of polyethylene of raised temperature resistance (PERT) compound specifically designed for hot & cold water pressure pipe and under-floor heating applications. TRP-780 offers outstanding long-term hydrostatic strength, excellent resistance to slow crack growth, and enhanced thermal stability, ensuring safe and durable operation in demanding service conditions.

General

Form: Natural Pellets

Process: Extrusion

Application: PERT pressure pipes, Hot & cold water pipes, Underfloor and radiator heating systems

Additives: AO, PPA

Packaging: 25 kg sack



Properties

Property	Test Method	Unit	Result
Density	ISO 1183	g/cm ³	0.945±0.005
Melt Flow Rate (190°C/2.16kg)	ISO 1133	g/10 min	0.5±0.1
Tensile Strength at Break	ISO 527	MPa	26
Elongation at Break	ISO 527	%	700
Hardness	ISO 868	Shore D	62
Melting Point	ISO 11357	°C	128
Oxidation Induction Time	ISO 11357	min	60
Hydrostatic Strength (@95°C)	ISO 1167	h	>1000
ESCR (50°C, F50)	ISO 22088	h	>1000



Introduction

Calcium carbonate filled polyethylene compound is a high-performance masterbatch formulated to enhance the mechanical and processing properties of polyethylene-based products. With a high loading of calcium carbonate, this compound provides improved stiffness, dimensional stability, and cost-efficiency, while maintaining excellent processability in extrusion, injection, and blow molding applications. Engineered for both industrial reliability and commercial versatility, it offers manufacturers a dependable solution for producing high-quality, reinforced polyethylene products while optimizing material usage and production efficiency.

Description

CFP-180 is a cost-optimized carbonate-filled polyethylene compound reinforced with 10 to 80% ultrafine treated- CaCO_3 powder. CFP-180 is engineered to improve stiffness, dimensional stability, printability and surface finish while offering excellent processing performance in extrusion and injection molding applications.

General

Form: Natural/White Pellets

Process: Extrusion, Injection, Blow molding

Application: Packaging films and sheets, Containers and bottles, Household articles, Cable and wire

Additives: AO, PPA, Filler

Packaging: 25 kg sack / 850 kg big bag



Properties

Property	Test Method	Unit	Result
Density	ISO 1183	g/cm^3	0.96-1.6
Melt Flow Rate (190°C/5kg)	ISO 1133	$\text{g}/10 \text{ min}$	0.5-2
Filler Content	ISO 3451	%	10-80
Tensile Strength	ISO 527	MPa	15-20
Elongation at Break	ISO 527	%	300-500
Hardness	ISO 868	Shore D	55-65
Vicat Softening Temperature	ISO 306	°C	126
Oxidation Induction Time	ISO 11357	min	20
Moisture Content	ISO 15512	%	<0.25



Introduction

Injection molding compound is a precision-engineered polymer formulation designed for high-performance injection molding applications. Optimized for flowability, thermal stability, and dimensional accuracy, this compound ensures consistent, defect-free molded parts with excellent surface finish and mechanical strength. Engineered with advanced additives and stabilizers, it provides superior processing reliability, reducing cycle times and enhancing productivity.

Description

CFI-620 is a carbonate-filled HDPE compound reinforced with ~10% ultrafine treated-CaCO₃ for injection molding applications. CFI-620 shows good processability, mechanical strength, stress-crack resistance and dimensional stability, making it ideal for the production of automotive, household appliances, electrical, and packaging.

General

Form: Natural Pellets

Process: Extrusion Injection molding

Application: Pallets, Crates, Household ware, Automotive appliances

Additives: AO, PPA, Filler

Packaging: 25 kg sack / 850 kg big bag



Properties

Property	Test Method	Unit	Result
Density	ISO 1183	g/cm ³	0.97±0.01
Melt Flow Rate (190°C/2.16kg)	ISO 1133	g/10 min	6±1
Filler Content	ISO 3451	%	<10
Tensile Strength	ISO 527	MPa	25
Elongation at Break	ISO 527	%	800
Hardness	ISO 868	Shore D	60
Vicat Softening Temperature	ISO 306	°C	130
Oxidation Induction Time	ISO 11357	min	30
ESCR (50°C, F50)	ISO 22088	h	>1000



Introduction

Blow molding compound is a high-quality polymer formulation specifically designed for efficient blow molding production. Engineered for excellent melt strength, uniform flow, and dimensional stability, this compound ensures consistent, defect-free hollow products such as bottles, containers, and tanks. Enhanced with stabilizers and processability modifiers, it provides superior thermal and mechanical performance, enabling reliable production while optimizing cycle times and material usage.

Description

CFB-310 is a carbonate-filled HDPE compound reinforced with ~10% ultrafine treated- CaCO_3 for blow molding applications. CFB-310 shows good impact resistance, stiffness-toughness balance, stress-crack resistance and dimensional stability, making it ideal for the production of bottles, containers, and technical hollow parts.

General

Form: Natural Pellets

Process: Extrusion blow molding

Application: Small and large containers and bottles

Additives: AO, PPA, Filler

Packaging: 25 kg sack / 850 kg big bag



Properties

Property	Test Method	Unit	Result
Density	ISO 1183	g/cm^3	0.96±0.01
Melt Flow Rate (190°C/5kg)	ISO 1133	g/10 min	1±0.2
Filler Content	ISO 3451	%	<10
Tensile Strength at Yield	ISO 527	MPa	24
Elongation at Break	ISO 527	%	600
Hardness	ISO 868	Shore D	60
Vicat Softening Temperature	ISO 306	°C	128
Oxidation Induction Time	ISO 11357	min	30
ESCR (50°C, F50)	ISO 22088	h	>1000



Introduction

Rotary molding compound is an advanced polymer formulation engineered specifically for rotational molding applications. Designed for uniform heat distribution, optimal flow, and excellent impact resistance, this compound ensures high-quality, seamless hollow products with consistent wall thickness and dimensional stability. Enhanced with stabilizers and processing aids, it provides reliable thermal and mechanical performance, facilitating efficient production cycles and minimizing defects.

Description

URM-380 is an engineered roto-molding MDPE compound with advanced UV and thermal additives designed for the rotational molding process. URM-380 exhibits outstanding impact and mechanical strength, resistance to outdoor weathering, stress-cracking, and long-term durability, making it ideal for water storage tank applications.

General

Form: Natural Pellets/Powders

Process: Rotational molding

Application: Water and chemical storage tanks, Automotive components, Industrial hollow parts

Additives: AO, PPA, Filler

Packaging: 25 kg sack / 850 kg big bag



Properties

Property	Test Method	Unit	Result
Density	ISO 1183	g/cm ³	0.940±0.005
Melt Flow Rate (190°C/2.16kg)	ISO 1133	g/10 min	4±0.5
Filler Content	ISO 3451	%	<1
Tensile Strength at Break	ISO 527	MPa	22
Elongation at Break	ISO 527	%	750
Hardness	ISO 868	Shore D	60
Vicat Softening Temperature	ISO 306	°C	128
Oxidation Induction Time	ISO 11357	min	60
ESCR (50°C, F50)	ISO 22088	h	>1000



Introduction

Recycled PE100 pipe compound is a high-performance polymer formulation specifically designed for the production of durable and environmentally sustainable PE100 pipes. Engineered with stabilizers and processing aids, this compound ensures excellent mechanical strength, impact resistance, and long-term dimensional stability, even under demanding pressure and environmental conditions. Optimized for extrusion, it provides consistent flow and high-quality pipe surfaces, making it ideal for water supply, sewage, and industrial piping applications.

Description

RWP-100 is a high-quality HDPE compound engineered from carefully selected and processed recycled HDPE materials. RWP-100 is designed to meet the essential mechanical, thermal, hydrostatic strength, and processing requirements of PE100-class compounds for pipe applications.

General

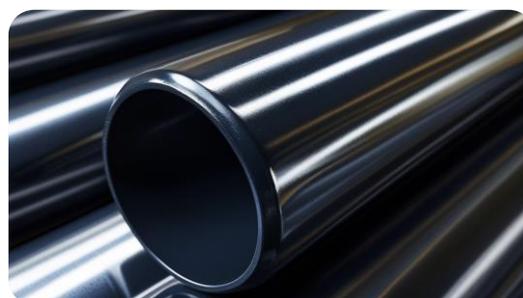
Form: Black Pellets

Process: Extrusion

Application: PE100 performance class pipes, Industrial and sewage pipelines

Additives: AO, PPA, Carbon Black

Packaging: 25 kg sack / 850 kg big bag



Properties

Property	Test Method	Unit	Result
Density	ISO 1183	g/cm ³	0.945±0.005
Melt Flow Index (190°C/5kg)	ISO 1133	g/10 min	0.3±0.05
Tensile Strength at Break	ISO 527	MPa	24
Elongation at Break	ISO 527	%	650
Carbon Black Content	ISO 6964	%	2.2
Oxidation Induction Time	ISO 11357	min	30
Vicat Softening Temperature	ISO 306	°C	127
Hydrostatic Strength (@80°C)	ISO 1167	h	>165



Introduction

Recycled film compound is an advanced polymer formulation designed for high-performance film extrusion applications. Engineered with stabilizers and processing aids, this compound ensures excellent melt strength, uniform flow, and consistent film thickness, producing durable, flexible, and high-quality films. Optimized for both cast and blown film processes, it provides enhanced mechanical properties, tear resistance, and dimensional stability, while promoting sustainable use of recycled materials.

Description

RHP-620 is a high-quality recycled grade of LL/HD polyethylene material formulated from eco-friendly post-industrial and/or post-consumer feedstock, carefully selected and processed to ensure consistency in performance and quality.

General

Form: Clear Recycled Pellets

Process: Extrusion, Injection, Blow molding

Application: General-purpose for extrusion, molding, and film applications

Additives: AO, PPA

Packaging: 25 kg sack / 850 kg big bag



Properties

Property	Test Method	Unit	Result
Density	ISO 1183	g/cm ³	0.94±0.005
Melt Flow Rate (190°C/2.16kg)	ISO 1133	g/10 min	0.6±0.1
Tensile Strength	ISO 527	MPa	19
Elongation at Break	ISO 527	%	650
Vicat Softening Temperature	ISO 306	°C	123
Oxidation Induction Time	ISO 11357	min	<20
Ash Content	ISO 3451	%	<0.5
Moisture Content	ISO 15512	%	<0.5



Introduction

Pipe adhesive compound is a high-performance polymer formulation engineered for reliable joining of thermoplastic pipes. Optimized for adhesion, chemical resistance, and long-term durability, this compound ensures strong, leak-proof bonds in a wide range of piping applications, including water supply, drainage, and industrial fluid systems. Its consistent processing characteristics facilitate easy application and precise assembly, making it ideal for both professional installers and industrial manufacturers.

Description

PAP-230 is a high-performance polyethylene-based adhesive compound formulated for joining thermoplastic pipes and fitting. PAP-230 is designed to create a high adhesion strength, durable, leak-proof, and pressure-resistant joint by strong chemical bond formation on the pipe surfaces.

General

Form: Natural Pellets

Process: Extrusion

Application: Potable water distribution systems, PERT pipes, 3LPE coated pipes, Industrial piping networks

Additives: AO, PPA

Packaging: 25 kg sack / 850 kg big bag



Properties

Property	Test Method	Unit	Result
Density	ISO 1183	g/cm ³	0.92±0.01
Melt Flow Rate (190°C/2.16kg)	ISO 1133	g/10 min	1.5±0.5
Tensile Strength at Break	ISO 527	MPa	20
Elongation at Break	ISO 527	%	700
Vicat Softening Temperature	ISO 306	°C	108
Oxidation Induction Time	ISO 11357	min	30
Moisture Content	ISO 15512	%	<0.2
Adhesion Strength	ISO 22970	N/cm	>250



Introduction

Polyethylene wax (PE-Wax) is a versatile polymer additive designed to enhance the processing and performance of thermoplastic materials. With excellent lubricating properties, it reduces friction and improves flow in extrusion, molding, and compounding operations. It also enhances surface finish, scratch resistance, and dimensional stability in finished products. Chemically stable and compatible with a wide range of polymers, this wax is suitable for applications in plastics, coatings, inks, adhesives, and masterbatches, providing both technical performance and processing efficiency.

Description

PWX-230 is a high-quality polyethylene wax (PE-Wax) additive designed for internal and external lubricating properties. PWX-230 provides excellent dispersibility for pigments and fillers, surface gloss, and processability, making it a versatile performance additive for plastics, coatings, inks, adhesives, and masterbatch production.

General

Form: White Flakes

Process: Extrusion

Application: Lubricant for PVC processing, Masterbatch and filler compounding, Coatings

Additives: None

Packaging: 25 kg sack / 850 kg big bag



Properties

Property	Test Method	Unit	Result
Density	ISO 1183	g/cm ³	0.92±0.01
Melting Point	ISO 11357	°C	105±5
Moisture Content	ISO 15512	%	<0.1
Softening Point (Ring & Ball)	ASTM E28	°C	100±5
Viscosity (@140°C)	ASTM D3236	cP	90±20
Needle Penetration	ASTM D1321	dmm	<5



Introduction

Black masterbatch is a high-quality, concentrated polymer additive engineered to provide deep, uniform coloration and enhanced performance in thermoplastic products. Formulated with premium carbon black, it delivers excellent UV resistance, thermal stability, and opacity, while maintaining superior dispersion and processability across extrusion, injection molding, and blow molding applications. Ideal for pipes, films, sheets, and molded components, this masterbatch ensures consistent aesthetics, durability, and protection against environmental stress, making it a reliable solution for a wide range of industrial and consumer applications.

Description

BCP-460 is a black polyethylene-base masterbatch containing 40% ultrafine carbon black powder, engineered to deliver deep black coloration, excellent opacity, and enhanced functional performance in plastic applications. BCP-460 offers excellent dispersion, uniform surface appearance, compatibility, and outstanding UV & thermal stability.

General

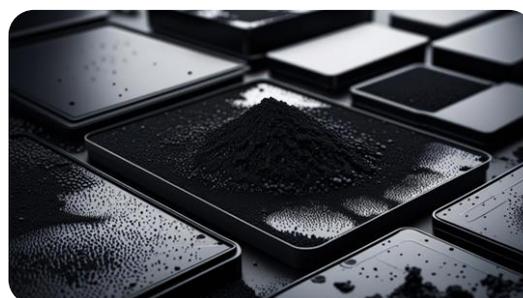
Form: Black Pellets

Process: Extrusion, Injection, Blow molding

Application: General Purpose, Pipes, Cables, Films & sheets, Household goods, Automotive parts

Additives: AO, PPA, Filler

Packaging: 25 kg sack / 850 kg big bag



Properties

Property	Test Method	Unit	Result
Density	ISO 1183	g/cm ³	1.2±0.1
Melt Flow Rate (190°C/2.16kg)	ISO 1133	g/10 min	1±0.5
Filler Content	ISO 3451	%	40
Tensile Strength	ISO 527	MPa	22
Elongation at Break	ISO 527	%	700
Hardness	ISO 868	Shore D	60
Vicat Softening Temperature	ISO 306	°C	129
Oxidation Induction Time	ISO 11357	min	30
Moisture Content	ISO 15512	%	<0.25



Introduction

White masterbatch is a high-quality polymer concentrate designed to provide uniform pigmentation, excellent opacity, and superior brightness in a wide range of plastic products. Formulated for optimal dispersion and compatibility with various polymer matrices, it ensures consistent color performance, enhanced surface appearance, and improved processability. Ideal for applications in injection molding, extrusion, and blow molding, this masterbatch combines aesthetic appeal with reliable technical performance, meeting the demands of both industrial and consumer-grade plastic products.

Description

WTP-270 is a white polyethylene-base masterbatch containing 20 to 70% high-quality titanium dioxide (TiO_2) pigment, designed to provide superior whiteness, opacity, and coverage in plastic applications. WTP-270 offers high refractive index, excellent dispersion, compatibility, and outstanding UV & heat stability.

General

Form: White Pellets

Process: Extrusion, Injection, Blow molding

Application: General Purpose, Packaging films, Bags, Containers, Household items, Automotive parts

Additives: AO, PPA, Filler

Packaging: 25 kg sack / 850 kg big bag



Properties

Property	Test Method	Unit	Result
Density	ISO 1183	g/cm^3	1-1.7
Melt Flow Rate (190°C/2.16kg)	ISO 1133	$\text{g}/10 \text{ min}$	1-3
Filler Content	ISO 3451	%	20-70
Tensile Strength	ISO 527	MPa	16-20
Elongation at Break	ISO 527	%	300-500
Hardness	ISO 868	Shore D	55-60
Vicat Softening Temperature	ISO 306	°C	128
Oxidation Induction Time	ISO 11357	min	30
Moisture Content	ISO 15512	%	<0.25





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