

# WIRE & CABLE AND ELECTRICAL PVC GRANULES

**PLASTICKAR, AUGUST 2021** 

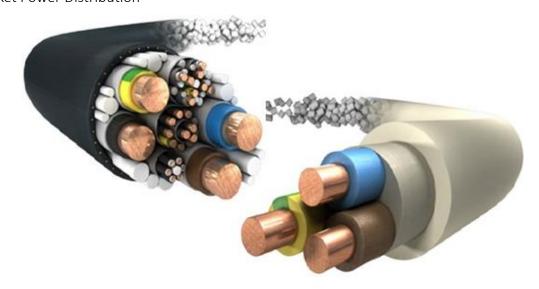


## WIRE, CABLE AND ELECTRICAL PVC GRANULES

Due to the high consumption of PVC granules in the electricity, wire and cable industry, PlasticKar has been producing various types of granules applicable in wire, cable and electricity industry in ST1 and ST2 thermal classes as follows for many years.

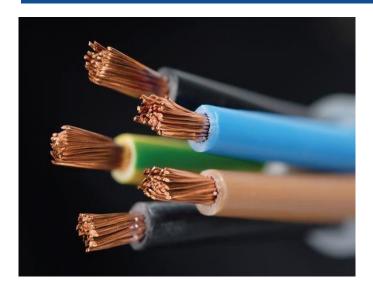
The efforts of our engineers and specialists are always aimed at improving the quality of our products:

- Flexible Insulation
- Flexible Sheathing
- Fixed Installation Insulation
- Fixed Installation Sheathing ST1
- Fixed Installation sheathing ST2
- Telecommunication Cables
- Flat Twin Core Cable
- Transparent Insulation
- LED Strip
- Optical Fiber
- PVC Coated Flexible GI Conduit
- PVC Filler
- Heavy Filler
- Industrial Socket/Outlet
- Industrial Plugs
- Industrial 3 Socket Power Distribution
- Electrical Duct





## **FLEXIBLE INSULATION**



Flexible insulation granule is the raw material for producing the first polymer layer that is in contact with the conductor. Therefore, insulation is more exposed to heat and damage due to high temperature than other polymer coatings used in cable. Insulations are made of PVC and must have certain mechanical and thermal properties in accordance with IEC60502 . The density of these granules is usually between 1.3 and 1.45 (g / cm³). Insulation granules are commonly used for low voltage cables.

Product Name	Flexible Insulation PVC Granule
Other Names	PVC granules for wire insulation
Product Code	GEAA-N (Natural)
Application	Wire Insulating
Features	<ul> <li>Production based on Global Standards</li> <li>Production based on customer requested mechanical properties</li> </ul>
Color	Natural, Milky Production capability in diverse colors according to customer request.
Packaging	In 25 kg bags of transparent polyethylene and finally bags are packed on wooden pallets. The weight of the pallets is approximately 1250 kg. The package can be changed according to customer request.

Product Code: GEAA-N

**Application:** Wire & Cable - Flexible Insulation

**Color:** Milky (Colorless/Natural)

Form: Granule

Packaging: 25 KG PE Bag / Palletized

Storage: Dry place, away from sun shine and temperature lower than 30°C

Properties	Test Method	Units	Typical Value		
Туре	BS 6746	-	TI1		
Tensile strength	ASTM-D638	N/mm²	17.3±0.5		
Elongation at break	ASTM-D638	%	260±10		
Gravity	ASTM-D1895	G/CM^3	1.44±0.03		
Hardness	ASTM-D2240	Shore A	82±2		
Thermal stability at 200°C	ASTM-D749	MIN	61		
Operating Temperature		°C	70		
Properties after aging 7 days at 100°C					
Tensile strength	ASTM-D638	N/mm²	17.8±0.5		
Elongation at break	ASTM-D638	%	245±10		

#### **Processing Conditions:**

The following temperature profile is recommended as a guide line.

Barrel Temperature: (±10 °C)				
Zone 1	Zone 2	Zone 3	Zone 4	
160	165	170	175	



## **FLEXIBLE SHEATHING**



Flexible sheathing granule is a material for the production of the last polymeric layer of flexible cables which is placed on the outer surface of them.

The main feature of these granules are flexibility and high thermal resistance.

These granules are mainly produced in white or black colors and used for low-voltage cables.

Product Name	Flexible Sheathing PVC Granule
Other Names	PVC granules for flexible cable coating
Product Code	GERA-N (Natural)
Application	Cable sheathing
Features	<ul> <li>Production based on Global Standards</li> <li>Production based on customer requested mechanical properties</li> </ul>
Color	Natural, Milky Production capability in diverse colors according to customer request.
Packaging	In 25 kg bags of transparent polyethylene and finally bags are packed on wooden pallets. The weight of the pallets is approximately 1250 kg. The package can be changed according to customer request.

Product Code: GERA-N

**Application:** Wire & Cable - Flexible Sheathing

**Color:** Milky (Colorless/Natural)

Form: Granule

Packaging: 25 KG PE Bag / Palletized

Storage: Dry place, away from sun shine and temperature lower than 30°C

Properties	Test Method	Units	Typical Value		
Туре	BS 6746	-	TI1		
Tensile strength	ASTM-D638	N/mm²	14.1±0.5		
Elongation at break	ASTM-D638	%	300±10		
Gravity	ASTM-D1895	G/CM^3	1.44±0.03		
Hardness	ASTM-D2240	Shore A	75±2		
Thermal stability at 200°C	ASTM-D749	MIN	60		
Operating Temperature		°C	80		
Properties after aging 7 days at 100°C					
Tensile strength	ASTM-D638	N/mm²	14.6±0.5		
Elongation at break	ASTM-D638	%	285±10		

#### **Processing Conditions:**

The following temperature profile is recommended as a guide line.

Barrel Temperature: (±10 °C)				
Zone 1	Zone 2	Zone 3	Zone 4	
160	165	170	180	



#### **FIXED INSTALLATION INSULATION**



Fixed installation insulation granules are used to produce the first polymer coating in contact with the conductor. Insulation is more exposed to heat and damage due to high temperatures than other polymer coatings used in cable. Insulations are made of PVC and must have certain mechanical and thermal properties in accordance with IEC60502 standard.

Its density is between 1.40 to 1.45 (g / cm³). The granules used to produce fixed installation insulation are usually colorless and are used as insulation for light cables, single and multi stranded wires.

Product Name	Fixed Installation Insulation Granules
Other Names	PVC granules for Fixed Insulation
Product Code	GEAN-N (Natural)
Application	Conductor insulation for cable
Features	<ul> <li>Production based on Global Standards</li> <li>Production based on customer requested mechanical properties</li> </ul>
Color	Natural, Milky Production capability in diverse colors according to customer request.
Packaging	In 25 kg bags of transparent polyethylene and finally bags are packed on wooden pallets. The weight of the pallets is approximately 1250 kg. The package can be changed according to customer request.

Product Code: GEAN-N

**Application:** Wire & Cable – Fixed Installation Insulation

Color: Milky (Colorless/Natural)

Form: Granule

Packaging: 25 KG PE Bag / Palletized

**Storage:** Dry place, away from sun shine and temperature lower than 30°C

Properties	Test Method	Units	Typical Value		
Туре	BS 6746	-	TI1		
Tensile strength	ASTM-D638	N/mm²	16.5±0.5		
Elongation at break	ASTM-D638	%	240±10		
Gravity	ASTM-D1895	G/CM^3	1.44±0.03		
Hardness	ASTM-D2240	Shore A	86±2		
Thermal stability at 200°C	ASTM-D749	MIN	62		
Operating Temperature		°C	70		
Properties after aging 7 days at 100°C					
Tensile strength	ASTM-D638	N/mm²	17±0.5		
Elongation at break	ASTM-D638	%	225±10		

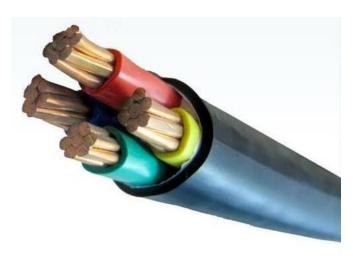
#### **Processing Conditions:**

The following temperature profile is recommended as a guide line.

Barrel Temperature: (±10 °C)				
Zone 1	Zone 2	Zone 3	Zone 4	
165	170	175	180	



# **FIXED INSTALLATION SHEATHING (STI)**



Fixed installation sheathing PVC granule is a material for producing the last polymer layer that is placed on the outer surface of the cable.

This layer is known as ST1 sheath (with heat resistance up to 70  $^{\circ}$  C) in the wire and cable industry and its characteristics should be within the IEC 60502 standard range.

The ST1 sheath is usually black and is used for low voltage cables.

Product Name	Fixed Installation Sheathing Granules
Other Names	PVC granules for sheathing (ST1)
Product Code	GERN-N (Natural)
Application	Sheathing for low voltage cable
Features	<ul> <li>Production based on Global Standards</li> <li>Production based on customer requested mechanical properties</li> </ul>
Color	Natural, Milky Production capability in diverse colors according to customer request.
Packaging	In 25 kg bags of transparent polyethylene and finally bags are packed on wooden pallets. The weight of the pallets is approximately 1250 kg. The package can be changed according to customer request.

Product Code: GERN-N

**Application:** Wire & Cable – Fixed Installation Sheathing

**Color:** Milky (Colorless/Natural)

Form: Granule

Packaging: 25 KG PE Bag / Palletized

Storage: Dry place, away from sun shine and temperature lower than 30°C

Properties	Test Method	Units	Typical Value		
Туре	BS 6746	-	TI1		
Tensile strength	ASTM-D638	N/mm²	16.1±0.5		
Elongation at break	ASTM-D638	%	267±10		
Gravity	ASTM-D1895	G/CM^3	1.44±0.03		
Hardness	ASTM-D2240	Shore A	82±2		
Thermal stability at 200°C	ASTM-D749	MIN	61		
Operating Temperature		°C	80		
Properties after aging 7 days at 100°C					
Tensile strength	ASTM-D638	N/mm²	16.6±0.5		
Elongation at break	ASTM-D638	%	251±10		

#### **Processing Conditions:**

The following temperature profile is recommended as a guide line.

Barrel Temperature: (±10 °C)				
Zone 1	Zone 2	Zone 3	Zone 4	
165	170	175	180	



## **FIXED INSTALLATION SHEATHING (ST2)**

ST2 fixed installation sheathing granule (with heat resistance up to 90 °C) is the raw material for the production of the last polymer layer which is placed on the outer surface of the cable. This layer is also known as ST2 sheath in the wire and cable industry and its characteristics should be within the IEC 60502 standard range.

The main differences between ST1 and ST2 are in color and thermal stability. The ST2 sheath is usually red and is used for medium and high voltage cables.



Product Name	Fixed Installation Sheathing Granules
Other Names	PVC granules for sheathing (ST2)
Product Code	GERNT2-N (Natural)
Application	Sheathing for medium to high voltage cables
Features	<ul> <li>Production based on Global Standards</li> <li>Production based on customer requested mechanical properties</li> </ul>
Color	Natural, Milky Production capability in diverse colors according to customer request.
Packaging	In 25 kg bags of transparent polyethylene and finally bags are packed on wooden pallets. The weight of the pallets is approximately 1250 kg. The package can be changed according to customer request.

Product Code: GERNT2-N

**Application:** Wire & Cable – Fixed Installation Sheathing

**Color:** Milky (Colorless/Natural)

Form: Granule

Packaging: 25 KG PE Bag / Palletized

Storage: Dry place, away from sun shine and temperature lower than 30°C

Properties	Test Method	Units	Typical Value		
Туре	BS 6746	-	ST2		
Tensile strength	ASTM-D638	N/mm²	13±0.5		
Elongation at break	ASTM-D638	%	215±10		
Gravity	ASTM-D1895	G/CM^3	1.49±0.03		
Hardness	ASTM-D2240	Shore A	80±2		
Thermal stability at 200°C	ASTM-D749	MIN	91		
Operating Temperature		°C	90		
Properties after aging 7 days at 100°C					
Tensile strength	ASTM-D638	N/mm²	12±0.5		
Elongation at break	ASTM-D638	%	195±10		

#### **Processing Conditions:**

The following temperature profile is recommended as a guide line.

Barrel Temperature: (±10 °C)					
Zone 1	Zone 2	Zone 3	Zone 4		
165 165 175 185					



## **TELECOMMUNICATION CABLES**

Telecommunication cable consists of a twisted pair wire and a sheathing layer.

These cables are usually used for telephone connections.

The most important features of raw materials required for the production of these cables are elongation, tensile strength and high level of thermal stability.



Product Name	Telecommunication Cable PVC Granules
Product Code	GERT-N (Natural)
Application	Sheathing for telecommunication cables
Features	<ul> <li>Production based on Global Standards</li> <li>Production based on customer requested mechanical properties</li> </ul>
Color	Natural, Milky Production capability in diverse colors according to customer request.
Packaging	In 25 kg bags of transparent polyethylene and finally bags are packed on wooden pallets. The weight of the pallets is approximately 1250 kg. The package can be changed according to customer request.

Product Code: GERT-N

**Application:** Wire & Cable – Telecommunication Cables

**Color:** Milky (Colorless/Natural)

Form: Granule

Packaging: 25 KG PE Bag / Palletized

Storage: Dry place, away from sun shine and temperature lower than 30°C

Properties	Test Method	Units	Typical Value		
Туре	BS 6746	-	TI1		
Tensile strength	ASTM-D638	N/mm²	18±0.5		
Elongation at break	ASTM-D638	%	250±10		
Gravity	ASTM-D1895	G/CM^3	1.4±0.03		
Hardness	ASTM-D2240	Shore A	87±2		
Thermal stability at 200°C	ASTM-D749	MIN	80		
Operating Temperature		°C	80		
Properties after aging 7 days at 100°C					
Tensile strength	ASTM-D638	N/mm²	19±0.5		
Elongation at break	ASTM-D638	%	235±10		

#### **Processing Conditions:**

The following temperature profile is recommended as a guide line.

Barrel Temperature: (±10 °C)				
Zone 1	Zone 2	Zone 3	Zone 4	
160	165	170	175	



## **FLAT TWIN-CORE CABLE**

Twin-core cables are produced in the form of double strands consisting of two metal conductors and an insulating sheath.

These cables are commonly used in places where there is little mechanical pressure. Flat twin-core cable PVC granule is raw material for the production of white polymer layer which is placed as a coating on the surface of two conductors.

Important features of this polymer layer include high flexibility, good tensile strength and glossiness.



Product Name	Flat Twin-Core Cable Granules
Other Names	Twin-Core cable sheathing granule
Product Code	GEBT-W (White)
Application	Sheathing for flat and twin-core cable
Features	<ul> <li>Production based on Global Standards</li> <li>Production based on customer requested mechanical properties</li> </ul>
Color	White Production capability in diverse colors according to customer request.
Packaging	In 25 kg bags of transparent polyethylene and finally bags are packed on wooden pallets. The weight of the pallets is approximately 1250 kg. The package can be changed according to customer request.

Product Code: GEBT-W

**Application:** Wire & Cable – Flat Twin-Core Cable

**Color:** White **Form:** Granule

Packaging: 25 KG PE Bag / Palletized

Storage: Dry place, away from sun shine and temperature lower than 30°C

Properties	Test Method	Units	Typical Value		
Туре	BS 6746	-	TI1		
Tensile strength	ASTM-D638	N/mm²	15.1±0.5		
Elongation at break	ASTM-D638	%	262±10		
Gravity	ASTM-D1895	G/CM^3	1.44±0.03		
Hardness	ASTM-D2240	Shore A	82±2		
Thermal stability at 200°C	ASTM-D749	MIN	75		
Operating Temperature		°C	80		
Properties after aging 7 days at 100°C					
Tensile strength	ASTM-D638	N/mm²	16.1±0.5		
Elongation at break	ASTM-D638	%	250±10		

#### **Processing Conditions:**

The following temperature profile is recommended as a guide line.

Barrel Temperature: (±10 °C)					
Zone 1 Zone 2 Zone 3 Zone 4					
160 165 170 175					



#### **TRANSPARENT WIRE**



Transparent wires are made of two parts, conductive metal and insulation. The conductive part is made of copper and aluminum according to the application.

The layer that is coated as insulation on the conductor surface is made of PVC.

Flexibility, glossiness and transparency are very important features of these materials.

Product Name	Transparent Wire Insulation Granules
Other Names	PVC granules for Transparent Cable
Product Code	GEA-R (Transparent)
Application	Insulation for transparent wire
Features	<ul> <li>Production based on Global Standards</li> <li>Production based on customer requested mechanical properties</li> </ul>
Color	Transparent Production capability in diverse colors according to customer request.
Packaging	In 20 kg bags of transparent polyethylene and finally bags are packed on wooden pallets. The weight of the pallets is approximately 1250 kg. The package can be changed according to customer request.

**Product Code:** GEA-T

**Application:** Wire & Cable – Transparent Wire

**Color:** Transparent **Form:** Granule

Packaging: 25 KG PE Bag / Palletized

Storage: Dry place, away from sun shine and temperature lower than 30°C

Properties	Test Method	Units	Typical Value		
Туре	BS 6746	-	TI1		
Tensile strength	ASTM-D638	N/mm²	14.9±0.5		
Elongation at break	ASTM-D638	%	331±10		
Gravity	ASTM-D1895	G/CM^3	1.18±0.03		
Hardness	ASTM-D2240	Shore A	67±2		
Thermal stability at 200°C	ASTM-D749	MIN	60		
Operating Temperature		°C	70		
Properties after aging 7 days at 100°C					
Tensile strength	ASTM-D638	N/mm²	13.5±0.5		
Elongation at break	ASTM-D638	%	320±10		

#### **Processing Conditions:**

The following temperature profile is recommended as a guide line.

Barrel Temperature: (±10 °C)					
Zone 1 Zone 2 Zone 3 Zone 4					
140 150 155 160					



## **LED STRIP LIGHTS**



LED strips are a new generation of lighting systems that have a decorative aspect in addition to lighting. These strips contain a transparent layer that is capable of transmitting light. This transparent layer is made of PVC, the important features of which are light resistance, high flexibility, transparency and glossiness.

Product Name	LED Strip Lights Granules
Other Names	Transparent PVC granules for strip lights
Product Code	GELED-T (Tranparent)
Application	Lighting strips
Features	<ul> <li>Production based on Global Standards</li> <li>Production based on customer requested mechanical properties</li> </ul>
Color	Transparent Production capability in diverse colors according to customer request.
Packaging	In 20 kg bags of transparent polyethylene and finally bags are packed on wooden pallets. The weight of the pallets is approximately 1250 kg. The package can be changed according to customer request.

Product Code: GELED-T

**Application:** Wire & Cable – LED Strip Lights

**Color:** Transparent **Form:** Granule

Packaging: 25 KG PE Bag / Palletized

Storage: Dry place, away from sun shine and temperature lower than 30°C

Properties	Test Method	Units	Typical Value		
Туре	BS 6746	-	TI1		
Tensile strength	ASTM-D638	N/mm²	14.2±0.5		
Elongation at break	ASTM-D638	%	410±10		
Gravity	ASTM-D1895	G/CM^3	1.18±0.03		
Hardness	ASTM-D2240	Shore A	65±2		
Thermal stability at 200°C	ASTM-D749	MIN	60		
Operating Temperature		°C	70		
Properties after aging 7 days at 100°C					
Tensile strength	ASTM-D638	N/mm²	13.2±0.5		
Elongation at break	ASTM-D638	%	390±10		

#### **Processing Conditions:**

The following temperature profile is recommended as a guide line.

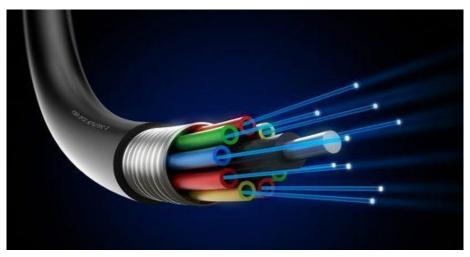
Barrel Temperature: (±10 °C)				
Zone 1	Zone 2	Zone 3	Zone 4	
140	150	155	160	



## **FIBER-OPTIC CABLE**

Optical fiber is used to transmit data at high speeds in landline, long distance, computer networks and the Internet. Fiber-optic cables are made of thin strands of silica (glass) as the core and a very thin polymer layer of PVC. This polymer layer is placed on a large number of thin glass fibers as insulation and protection.

Flexibility, tensile strength and brightness are the main features of PVC fiber optic cable insulations.



Product Name	Optical Fiber Granules
Other Names	Fiber-Optic insulation
Product Code	GEOF-N (Natural)
Application	Fiber-Optic Cables
Features	<ul> <li>Production based on Global Standards</li> <li>Production based on customer requested mechanical properties</li> </ul>
Color	Milky Production capability in diverse colors according to customer request.
Packaging	In 25 kg bags of transparent polyethylene and finally bags are packed on wooden pallets. The weight of the pallets is approximately 1250 kg. The package can be changed according to customer request.

Product Code: GEOF-N

**Application:** Wire & Cable – Optical Fiber Cable

**Color:** Milky (Colorless/Natural)

Form: Granule

Packaging: 25 KG PE Bag / Palletized

Storage: Dry place, away from sun shine and temperature lower than 30°C

Properties	Test Method	Units	Typical Value		
Туре	BS 6746	-	TI1		
Tensile strength	ASTM-D638	N/mm²	18±0.5		
Elongation at break	ASTM-D638	%	210±10		
Gravity	ASTM-D1895	G/CM^3	1.47±0.03		
Hardness	ASTM-D2240	Shore A	90±2		
Thermal stability at 200°C	ASTM-D749	MIN	70		
Operating Temperature		°C	80		
Properties after aging 7 days at 100°C					
Tensile strength	ASTM-D638	N/mm²	17±0.5		
Elongation at break	ASTM-D638	%	190±10		

#### **Processing Conditions:**

The following temperature profile is recommended as a guide line.

Barrel Temperature: (±10 °C)				
Zone 1	Zone 2	Zone 3	Zone 4	
160	170	175	180	



## **PVC COATED FLEXIBLE GI CONDUIT**



Flexible GI Conduit is used to protect wires and cables in construction. It is made of aluminum with a thin layer of PVC as a cover on its surface. Important features of this thin layer include high flexibility, good tensile strength, glossiness and polished surface of final product. Due to the fact that the main use of these flexible pipes is in the open space, it must have high resistance to UV rays, so they are mainly produced in white and black colors.

Product Name	Flexible GI Conduit PVC Granule
Other Names	Flexible Conduit Granule
Product Code	GECFC-N (Natural)
Application	Flexible Conduit Coating
Features	<ul> <li>Production based on Global Standards</li> <li>Production based on customer requested mechanical properties</li> </ul>
Color	Milky Production capability in diverse colors according to customer request.
Packaging	In 25 kg bags of transparent polyethylene and finally bags are packed on wooden pallets. The weight of the pallets is approximately 1250 kg. The package can be changed according to customer request.

**Product Code:** GECFC-N

**Application:** Wire & Cable – PVC Coated Flexible GI Conduit

**Color:** Milky (Colorless/Natural)

Form: Granule

Packaging: 25 KG PE Bag / Palletized

Storage: Dry place, away from sun shine and temperature lower than 30°C

Properties	Test Method	Units	Typical Value		
Туре	BS 6746	-	TI1		
Tensile strength	ASTM-D638	N/mm²	13.2±0.5		
Elongation at break	ASTM-D638	%	280±10		
Gravity	ASTM-D1895	G/CM^3	1.28±0.03		
Hardness	ASTM-D2240	Shore A	78±2		
Thermal stability at 200°C	ASTM-D749	MIN	62		
Operating Temperature		°C	70		
Properties after aging 7 days at 100°C					
Tensile strength	ASTM-D638	N/mm²	12.2±0.5		
Elongation at break	ASTM-D638	%	260±10		

#### **Processing Conditions:**

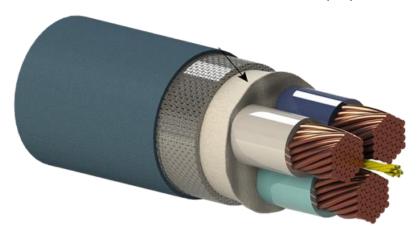
The following temperature profile is recommended as a guide line.

Barrel Temperature: (±10 °C)				
Zone 1	Zone 2	Zone 3	Zone 4	
150	155	165	170	



# **PVC CABLE FILLER**

PVC Filler granule is the raw material for the production of the middle layer (the layer between the insulation and the sheathing) of the cable. Fillers are at a lower level than other polymer layers in terms of physical, mechanical and thermal stability properties and are used only to smooth the substrates and prepare the cable for sheathing.



Product Name	PVC Cable Filler
Other Names	Light Filler Granule
Product Code	GEFL02-N (Natural)
Application	Filling the middle layer of cable
Features	<ul> <li>Production based on Global Standards</li> <li>Production based on customer requested mechanical properties</li> </ul>
Color	Milky Production capability in diverse colors according to customer request.
Packaging	In 25 kg bags of transparent polyethylene and finally bags are packed on wooden pallets. The weight of the pallets is approximately 1250 kg. The package can be changed according to customer request.

Product Code: GEFL02-N

**Application:** Wire & Cable – PVC Filler

**Color:** Milky (Colorless/Natural)

Form: Granule

Packaging: 25 KG PE Bag / Palletized

Storage: Dry place, away from sun shine and temperature lower than 30°C

Properties	Test Method	Units	Typical Value		
Туре	BS 6746	-	TI1		
Tensile strength	ASTM-D638	N/mm²	4.1±0.5		
Elongation at break	ASTM-D638	%	140±10		
Gravity	ASTM-D1895	G/CM^3	1.72±0.03		
Hardness	ASTM-D2240	Shore A	73±2		
Thermal stability at 200°C	ASTM-D749	MIN	80		
Operating Temperature		°C	90		
Properties after aging 7 days at 100°C					
Tensile strength	ASTM-D638	N/mm²	3.1±0.5		
Elongation at break	ASTM-D638	%	120±10		

#### **Processing Conditions:**

The following temperature profile is recommended as a guide line.

Barrel Temperature: (±10 °C)					
Zone 1	Zone 2	Zone 3	Zone 4		
165 170 180 185					



# **PVC FILLER (HIGH DENSITY)**



PVC Filler granule is the raw material for the production of the middle layer (the layer between the insulation and the sheathing) of the cable. Fillers are at a lower level than other polymer layers in terms of physical, mechanical and thermal stability properties and are used only to smooth the substrates and prepare the cable for sheathing.

Cable companies usually use fillers that contain a higher percentage of calcium carbonate. For this reason, PlasticKar company has introduced this grade to the market as heavy filler.

Product Name	PVC Cable Filler
Other Names	Heavy Filler Granule
Product Code	GEFL-N (Natural)
Application	Filling the middle layer of cable
Features	<ul> <li>Production based on Global Standards</li> <li>Production based on customer requested mechanical properties</li> </ul>
Color	Milky Production capability in diverse colors according to customer request.
Packaging	In 25 kg bags of transparent polyethylene and finally bags are packed on wooden pallets. The weight of the pallets is approximately 1250 kg. The package can be changed according to customer request.

Product Code: GEFL-N

**Application:** Wire & Cable – PVC Filler

**Color:** Milky (Colorless/Natural)

Form: Granule

Packaging: 25 KG PE Bag / Palletized

Storage: Dry place, away from sun shine and temperature lower than 30°C

Properties	Test Method	Units	Typical Value		
Туре	BS 6746	-	TI1		
Tensile strength	ASTM-D638	N/mm²	2.7±0.5		
Elongation at break	ASTM-D638	%	110±10		
Gravity	ASTM-D1895	G/CM^3	1.81±0.03		
Hardness	ASTM-D2240	Shore A	74±2		
Thermal stability at 200°C	ASTM-D749	MIN	80		
Operating Temperature		°C	90		
Properties after aging 7 days at 100°C					
Tensile strength	ASTM-D638	N/mm²	1.7±0.5		
Elongation at break	ASTM-D638	%	100±10		

#### **Processing Conditions:**

The following temperature profile is recommended as a guide line.

Barrel Temperature: (±10 °C)				
Zone 1	Zone 2	Zone 3	Zone 4	
165	170	180	185	



## **INDUSTRIAL SOCKET COMPOUND**



Industrial socket/outlet are important ancillary equipment in the electricity industry. Impact resistance, temperature and humidity resistance are the most important factors of these compounds.

These parts are usually produced in grey or black, shiny and polished and through the plastic injection process.

Product Name	Industrial Socket Compound
Other Names	Industrial Outlet Granules
Product Code	GEIS-G (Grey)
Application	Industrial Socket/Outlet Production
Features	<ul> <li>Production based on Global Standards</li> <li>Production based on customer requested mechanical properties</li> </ul>
Color	Grey Production capability in diverse colors according to customer request.
Packaging	In 25 kg bags of transparent polyethylene and finally bags are packed on wooden pallets. The weight of the pallets is approximately 1250 kg. The package can be changed according to customer request.

**Product Code:** GEIS-G

**Application:** Electrical Equipment – Industrial Socket/Outlet

Color: Grey Form: Granule

Packaging: 25 KG PE Bag / Palletized

Storage: Dry place, away from sun shine and temperature lower than 30°C

Properties	Test Method	Units	Typical Value		
Туре	BS 6746	-	TI1		
Tensile strength	ASTM-D638	N/mm²	22±0.5		
Elongation at break	ASTM-D638	%	95±10		
Gravity	ASTM-D1895	G/CM^3	1.42±0.03		
Hardness	ASTM-D2240	Shore A	95±2		
Thermal stability at 200°C	ASTM-D749	MIN	70		
Operating Temperature		°C	80		
Properties after aging 7 days at 100°C					
Tensile strength	ASTM-D638	N/mm²	20±0.5		
Elongation at break	ASTM-D638	%	85±10		

#### **Processing Conditions:**

The following temperature profile is recommended as a guide line.

Barrel Temperature: (±10 °C)				
Zone 1	Zone 2	Zone 3	Zone 4	
150	155	160	165	



## **INDUSTRIAL PLUGS**

Industrial plug is one of the important ancillary equipment in the electricity industry. The main consumption of these parts is industrial and their main features include impact resistance, temperature and humidity resistance.

These parts are usually produced in grey or black, shiny and polished and through the plastic injection process.



Product Name	Industrial Plugs Compound
Other Names	Industrial Plugs Granules
Product Code	GEIP-G (Grey)
Application	Industrial Plugs Production
Features	<ul> <li>Production based on Global Standards</li> <li>Production based on customer requested mechanical properties</li> </ul>
Color	Grey Production capability in diverse colors according to customer request.
Packaging	In 25 kg bags of transparent polyethylene and finally bags are packed on wooden pallets. The weight of the pallets is approximately 1250 kg. The package can be changed according to customer request.

**Product Code:** GEIP-G

**Application:** Electrical Equipment – Industrial Plugs

Color: Grey Form: Granule

Packaging: 25 KG PE Bag / Palletized

Storage: Dry place, away from sun shine and temperature lower than 30°C

Properties	Test Method	Units	Typical Value		
Туре	BS 6746	-	TI1		
Tensile strength	ASTM-D638	N/mm²	11±0.5		
Elongation at break	ASTM-D638	%	243±10		
Gravity	ASTM-D1895	G/CM^3	1.56±0.03		
Hardness	ASTM-D2240	Shore A	74±2		
Thermal stability at 200°C	ASTM-D749	MIN	80		
Operating Temperature		°C	90		
Properties after aging 7 days at 100°C					
Tensile strength	ASTM-D638	N/mm²	10±0.5		
Elongation at break	ASTM-D638	%	230±10		

#### **Processing Conditions:**

The following temperature profile is recommended as a guide line.

Barrel Temperature: (±10 °C)					
Zone 1 Zone 2 Zone 3 Zone 4					
160 165 170 180					



## **INDUSTRIAL 3 SOCKET POWER DISTRIBUTION**



Industrial 3 socket power distribution or corals are important ancillary equipment in the electricity industry. The main consumption of these parts is industrial and their main features include impact resistance and high pressure, resistance to temperature and humidity.

Industrial corals are usually black and are produced by plastic injection process.

Product Name	Industrial 3 Socket Power Distribution Compound
Other Names	Coral PVC Granules
Product Code	GECOR-B (Black)
Application	Industrial 3 Socket Power Distribution Production
Features	<ul> <li>Production based on Global Standards</li> <li>Production based on customer requested mechanical properties</li> </ul>
Color	Black Production capability in diverse colors according to customer request.
Packaging	In 25 kg bags of transparent polyethylene and finally bags are packed on wooden pallets. The weight of the pallets is approximately 1250 kg. The package can be changed according to customer request.

Product Code: GECOR-B

**Application:** Electrical Equipment – Industrial 3 Socket Power Distribution

Color: Black Form: Granule

Packaging: 25 KG PE Bag / Palletized

Storage: Dry place, away from sun shine and temperature lower than 30°C

Properties	Test Method	Units	Typical Value		
Туре	BS 6746	-	TI1		
Tensile strength	ASTM-D638	N/mm²	24±0.5		
Elongation at break	ASTM-D638	%	90±10		
Gravity	ASTM-D1895	G/CM^3	1.48±0.03		
Hardness	ASTM-D2240	Shore A	97±2		
Thermal stability at 200°C	ASTM-D749	MIN	70		
Operating Temperature		°C	80		
Properties after aging 7 days at 100°C					
Tensile strength	ASTM-D638	N/mm²	22±0.5		
Elongation at break	ASTM-D638	%	80±10		

#### **Processing Conditions:**

The following temperature profile is recommended as a guide line.

Barrel Temperature: (±10 °C)				
Zone 1	Zone 2	Zone 3	Zone 4	
150	155	160	165	



# **ELECTRICAL DUCT**

PVC ducts are accessories in the electrical industry that are used as shields and to create order in the wiring system of buildings.

Resistance to environmental factors, non-flammability and insulation of electricity are the most important features of these ducts.



Product Name	Electrical Duct Compound	
Other Names	PVC Duct Granules	
Product Code	GEDU-W (white)	
Application	PVC Electrical Duct Production	
Features	<ul> <li>Production based on Global Standards</li> <li>Production based on customer requested mechanical properties</li> </ul>	
Color	White Production capability in diverse colors according to customer request.	
Packaging	In 25 kg bags of transparent polyethylene and finally bags are packed on wooden pallets. The weight of the pallets is approximately 1250 kg. The package can be changed according to customer request.	

Product Code: GEDU-W

**Application:** Electrical Equipment – Electrical Duct

**Color:** White **Form:** Granule

Packaging: 25 KG PE Bag / Palletized

Storage: Dry place, away from sun shine and temperature lower than 30°C

Properties	Test Method	Units	Typical Value
Tensile strength	ASTM-D638	N/mm²	32±0.5
Elongation at break	ASTM-D638	%	25±10
Gravity	ASTM-D1895	G/CM^3	1.61±0.03
Hardness	ASTM-D2240	Shore D	79±2
Thermal stability at 200°C	ASTM-D749	MIN	50

#### **Processing Conditions:**

The following temperature profile is recommended as a guide line.

Barrel Temperature: (±10 °C)					
Zone 1	Zone 2	Zone 3	Zone 4		
180	190	200	210		



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